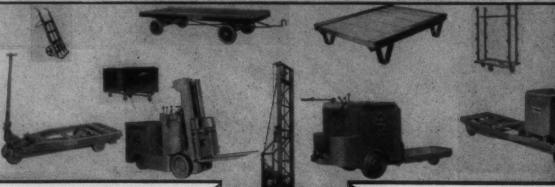
# textile

If you can't make a personal visit to Joanna Textile Mills Co. at Goldville, S. C., read the article about one of the industry's most progressive members. It begins on Page 27.

# 

Engineered to fit your needs



**MATERIALS** 

HANDLING

**EQUIPMEN** 





ADVERTISING

ENGINEERING SALES COMPANY

S. R. & V. G. Brookshire

PHONE 5026 CHARLOTTE, N. C.

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STARER
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Special
BELTINOW
do its very special
your plant-Now
job in your plant-Now

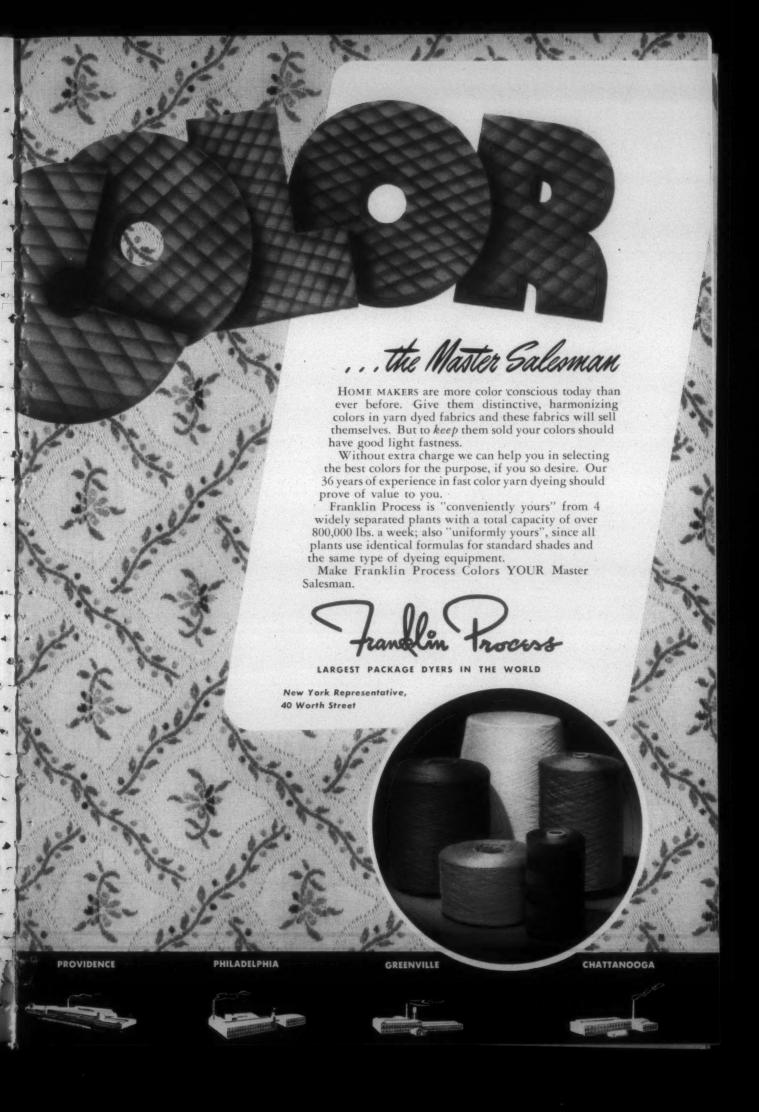
Why deprive your plant of the exclusive features 3-star belting embodies, features that are not just something to talk about, but are inherent characteristics of service purposely built in. A 3-star belt gives you unusually high tensile strength, positive pulley grip, and minimum stretch—all results of Charlotte complete control over every process in the manufacture from the raw hide to the finished belt.

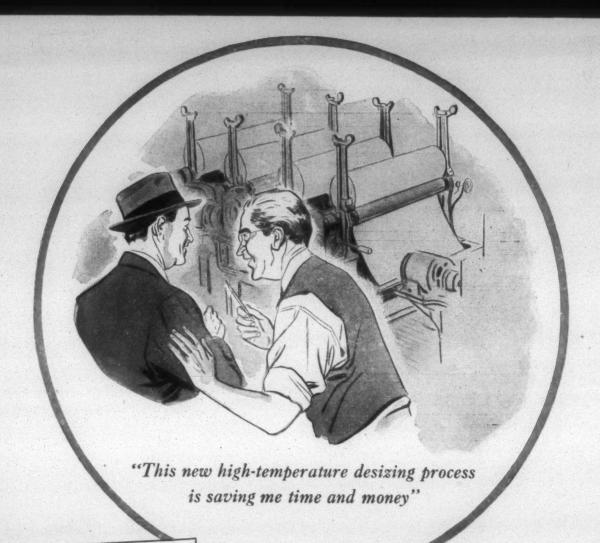
3-star leather belting is specifically made to meet the peculiar requirements of the textile industry.

LEATHER BELTING CO

CHARLOTTE, NORTH CAROLINA

Published Semi-Monthly by Clark Publishing Company, 218 W. Morehead St., Charlotte, N. C. Subscription \$1.50 per year in advance, Entered as selond-class mail matter March 2, 1911, at Postffloce, Charlotte, N. C., under Act of Congress, March 2, 1897.





#### THE SERVICE THAT BUILT OUR BUSINESS CAN HELP YOURS

Our business has been built largely on the practical help we have been able to give our customers, right in their own plants, in adapting Rohm & Haas products to their needs.

Our representatives are men with technical training and practical experience in the use of industrial chemicals. Call in a member of our textile chemicals department when you need assistance in choosing or using . . .

Fine Chemicals For Fine Quality Textiles Heavy fabrics can now be desized and dyed continuously on jigs. The size is uniformly removed in only three to four ends at 180°F., when RHOZYME DX is used.

High temperatures are practical with Rhozyme DX in many other types of desizing processes with faster starch removal as the result.

RHOZYME DX, you will find, is ideal for saving time in kier, kettle, and pad desizing, by working at the high temperatures possible with this unusual textile enzyme.

## **RHOZYME DX**

RHOZYME is a trade-mark Reg. U. S. Pat. Off.

Represented in South America by Cla. Rohmy Haas, S. R. L., Carlos Pellegrini 331, Buenes Aires, Argentina, and agents in principal South American cities

### ROHM & HAAS COMPANY

WASHINGTON SQUARE, PHILADELPHIA 5, PA.

Manufacturers of Chemicals for the Textile, Leather and other Industries . . . Plastics . . . Synthetic Insecticides . . . Fungicides . . . . Enzymes





## it pays to have a Gulf Lubrication Engineer "in the picture"

THE efficiency of textile machine lubrication has a direct bearing on yardage produced and on costs for maintenance and power. That's why a majority of leading mills keep a Gulf Lubrication Engineer "in the picture" and follow his helpful advice on their lubrication problems.

Gulf Lubrication Engineers recommend the proper application of the right oils and greases for every moving part—then co-operate closely with mill operating and maintenance men to keep lubrication on a sound scientific basis the year round. Result: less machine down time, greater yardage, and lower power and maintenance costs.

Make sure you are getting the advantages of all recent developments in lubricants and application methods. Write, wire, or phone your nearest Gulf office today and ask a Gulf Lubrication Engineer to call.



#### Gulf Oil Corporation - Gulf Refining Company

Division Sales Offices:

Boston · New York · Philadelphia · Pittsburgh · Atlanta New Orleans · Houston · Louisville · Toledo

## DURABLE WATER REPELLENCY

 $\mathbf{Y}^{\text{OU CAN GIVE}}$  cotton, viscose, acetate and rayon, as well as all other fibres and fabrics, effective and durable water repellency by a simple treatment on jig, pad or quetsch with

# Other ONYX SPECIALTIES for Textile Finishing

#### THE ONYXSANS

Cation-active softening agents for imparting lasting softness, smoothness and drape to fabrics impossible to improve by other methods. Onyxsan finishes improve the hand, not by a superficial oiling of the yarn, but by properties produced IN the yarn itself.

#### REPEL-O-TEX D3 and D4

These two materials are used in combination. A full dip with good impregnation on properly prepared cloth is the only treatment required. The finish is effective, durable and both stain and perspiration resistant as well.

No After Treatment — Goods treated with the recommended formula for Repel-O-Tex D3 and D4 require no baking or after treatment subsequent to jigging, padding or quetsching. They are handled in the normal manner.

Lasting Effects — Suitably prepared cloth, treated in accordance with directions, will have water repellent properties with a spray rating of 100. After three dry cleanings (U. S. Army Specifications) or three washings (at 100°F. with 0.1% soap and 0.05% soda ash) the rating will be 70 or better.

Write for the complete story on REPEL-O-TEX D3 and D4



#### ONYX OIL & CHEMICAL COMPANY

JERSEY CITY 2, N. J.

CHICAGO • PROVIDENCE • CHARLOTTE • ATLANTA
In Canada: ONYX OIL & CHEMICAL CO., LTD. — MONTREAL, TORONTO, ST. JOHNS, QUE.

For Export: ONYX INTERNATIONAL, JERSEY CITY 2, N. J.



CHEMICALS FOR DYEING AND FINISHING

## Guide Posts to Increased Production

# Good Loom Fixing and Proper Settings

Reduce Cost of Repairs

Decrease Loom Stops
Increase Production

Methods of fixing looms in the past have been as numerous as changes in our New England weather. Styles of loom fixing varied with the locality, the mill or even between sections in the mill where the individual loom fixer had his own personal settings for the looms in his charge. The rule of thumb was standard.

Peak production from X Series High Speed Looms calls for accurate and uniform setting of the several mechanisms to Established Standards. We told you last month this calls for the selection of a

#### Supervisor of Loom Fixing

He should have the necessary ability, training and experience. He should be given full responsibility for maintaining standards. He should have time to check the work as it is being done, to see that various units are being correctly set—and are kept correctly set. Where there is more than one shift he should coordinate the work of the fixers.

To assist him he should have a book of Standard Draper Settings—and see that each of his fixers has one and uses it. He should use Draper Loom Gauges. We sell them at a nominal charge.

He, and at least a selected number of his better fixers, should work with Draper Erectors when new looms are installed. These erectors are specialists on Draper Looms—have had years of weave room experience—and are ready to cooperate in every way possible.

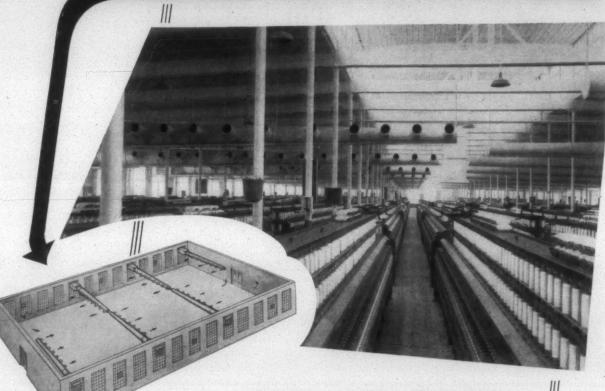
Third in a Series

Of What Well-Managed Mills Are Doing to Get the Best Results in Weaving

DRAPER CORPORATION
HOPEDALE MASSACHUSETTS

# Bahnson Londitioned Hir

WITH POSITIVE CIRCULATION



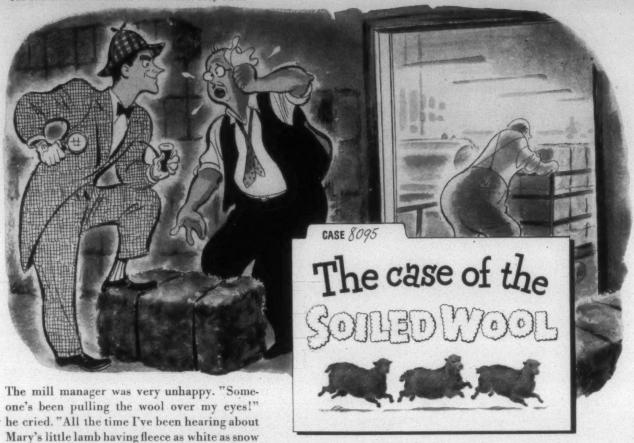
Temperature and humidity control is dependent upon effective distribution of properly conditioned air. With "Positive Circulation" the Bahnson Humiduct provides directional flow of conditioned air to obtain even distribution and a uniform room condition at working levels. The Humiduct is combined with refrigeration, air filters, and heating for a complete air conditioning system that is flexible, economical, and dependable.



886 DREWRY ST.

93 WORTH ST. NEW YORK CITY 703 EMBREE CRESCENT WESTFIELD, N. J.

976 W. 6TH ST. LOS ANGELES, CAL. W. J. WESTAWAY CO., LTD. HAMILTON, ONTARIO





-I never knew that sheep could be so dirty!"

He looked sadly at the wool around him. "This wool-scouring operation of ours is supposed to clean up the fibres, leave our wool soft and resilient for the blending and carding."



"I know," said the Armour Soap Sleuth. "And with the right type of soap your raw wool scouring will do just that. To do this job right, you need a low-titer soap like Armour's Texscour."



"You see, Texscour, a red oil base soap in flake form, has a low titer of 8-12 °C. Texscour gives quick, lasting suds—and lots of them! Texscour cuts grease, knocks out all soil and foreign material quickly, rinses out at once in warm water. You get a better, cleaner scour... and delicate wool fibres stay soft and resilient! Incidentally, Texscour is only one of the soaps Armour makes for the textile industry. Give me a ring if you need any help." With that the Sleuth grabbed his trusty glass and was off to solve another textile problem.

INDUSTRIAL SOAP DIVISION

# Armour and Company

1355 W. 31st Street, Chicago 9, Illinois

# FOSTER MODEL 102

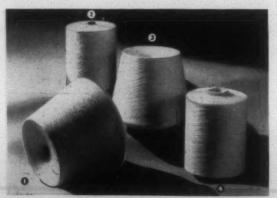
for winding cotton and other staple yarns



THE FOSTER MODEL 102 is a thoroughly modern winding machine, easily operated and inexpensively maintained. Simple in design and durable, it does not require a specially trained and highly paid mechanic as do some other winders. It can be kept at high efficiency with minimum loss of productive time.

One mill installed 26 Model 102 machines over a period of 7 years and the total repair cost during that period was \$3.50 per 100 spindle machine.

As to operating efficiency, it has been estimated that the average installation of Foster



1- Knitting Cone. 2-6'' perforated tube dyeing package.

3 - Warping Cone. 4 - Spring Tube Dyeing Package.

Model 102 winders, when replacing older models, will pay for itself within 3 years.

The Model 102 is a flexible machine capable of quick change to meet any and all winding requirements. It winds any type or count staple yarn and, with the aid of simple and inexpensive adjustments, can be made to wind knitting cones, warping cones, parallel tubes, dye packages, or short traverse cheeses, of any desired taper and any angle of wind from 9° to 18°. It winds dyed yarn, even when damp, without guide jumping, and can be equipped with an emulsion attachment for conditioning yarn.

This is the story of Foster Model 102. These are facts. It does more at less cost.

Send for Bulletin A-95

### FOSTER MACHINE CO.

WESTFIELD, MASSACHUSETTS, U.S.A.

SOUTHERN OFFICE: Johnston Bldg., Charlotte, N. C.; Canadian Representative: Ross-Whitehead & Co., Ltd., University Tower Bldg., 660 Ste. Catherine St., West, Montreal, Quebec.



"Diagen" Red AFR—a new stabilized azoic color—is suitable for printing both cotton and rayon. It has very good fastness to washing, dry cleaning, pressing, and crocking. It is easy to apply and develops with great facility. Especially recommended for use whenever brightness and fastness to washing are of major importance.

Our representatives will be glad to provide you with more information on this new product. E. I. du Pont de Nemours & Co. (Inc.), Dyestuffs Division, Wilmington 98, Delaware.

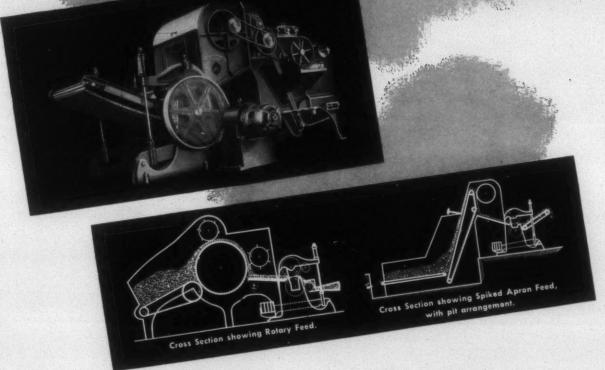
" REG. U. B. PAT. OFF.



BETTER THINGS FOR BETTER LIVING ... THROUGH CHEMISTRY

# New High Production ... Improved Quality with the

PROCTOR CONTINUOUS EXTRACTING UNIT



Here is a modern unit, which replaces the laborious intermittent method of centrifugal extracting. This more recent and highly efficient method not only assures you higher production, but actually improves the quality of the stock being processed.

Here are the highlights of its operation. An automatic feed delivers a uniform amount of wet stock to the squeeze rolls. A vibrating plate, arranged between the self-feed and the squeeze rolls, feeds the layer of wet stock into the nip of the rolls in such a manner as to prevent droppage of wet stock or bunching of the material as it goes through the rolls.

There is better opening of matted stock...wet spots in dried stock are eliminated...production is constant and very high...time losses are virtually eliminated...power and labor requirements are kept to a minimum.

This equipment is actually in a class by itself. The initial cost is not low. However, when you consider that with it you can combine increased production with improved quality—it is obvious that the Proctor Continuous Extracting Unit will pay for itself many times over. Even with somewhat higher initial costs, viewed over the long run, Proctor equipment is actually the least expensive.

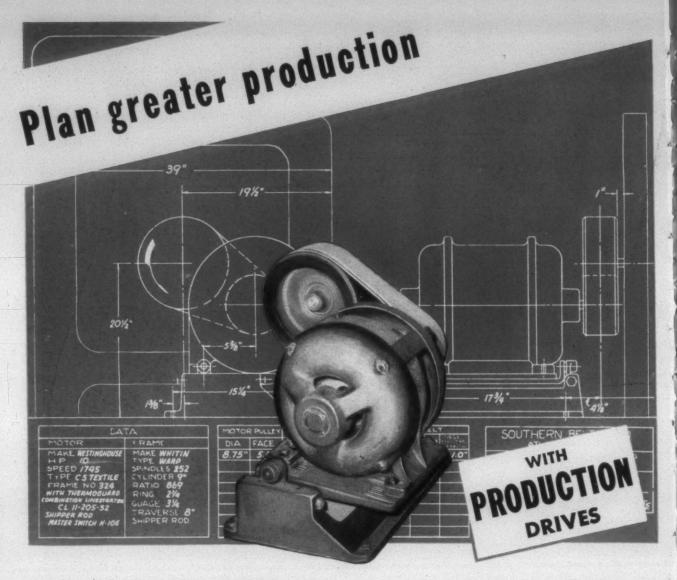
Proctor & Schwartz, Inc.

Philadelphia 20, Pa.

# COPRANTINES

For dyeing acetate and rayon blends that meet modern fastness requirements (particularly in dark shades), use COPRANTINES on the rayon, the new dyestuff range that combines both wash and light fastness.





# The most accurate method of setting and maintaining correct belt tension

More and more engineers—planning ahead for greater and more efficient production—are standardizing on our modern production drives.

In addition to assuring proper tension under

all conditions—these short-center, pivoted motor base, flat belt drives provide maximum production and ease of maintenance, and conserve both space and power.

Our engineers have had long experience in modernizing textile drives, and can be of *real* assistance to you. Let us send one to you for consultation.



# SOUTHERN BELTING COMPANY

Manufacturers

ATLANTA

**Distributors** 



# BARBER-COLMAN SPOOLING AND WARPING IS ACCEPTED PRACTICE IN PRACTICALLY ALL AMERICAN COTTON MILLS

To anyone who might have the opportunity to visit all the cotton mills in the United States, the scene above would become familiar because of its almost constant repetition. This operator is tending a Barber - Colman Automatic Spooler . . . filling empty bobbin pockets, taking off full cheeses, and putting on starters. All the other spooling functions . . . finding the ends, tying in new bobbins with weaver's knots, clearing out imperfections in the yarn, starting the cheese on the winding drum, measuring the cheese to gage its fullness, and even

delivering the empty bobbins to a sorting table . . . all these functions are performed automatically by the machine. The result is exceptionally uniform quality of spooling at low spooling cost. Every mill that has put in Barber - Colman Spoolers and Warpers has bought them because they would return the entire investment in a relatively short time, and after that would produce a substantial reduction in costs, and improvement in quality, for many years of practically trouble-free operation.

AUTOMATIC SPOOLERS . SUPER-SPEED WARPERS . WARP TYING MACHINES . DRAWING-IN MACHINES

#### BARBER - COLMAN COMPANY

ROCKFORD • ILLINOIS • U.S.A

FRAMINGHAM, MASS., U. S. A.

GREENVILLE, S. C., U. S. A.

MANCHESTER, ENGLAND

## **What Investment Promises More?**

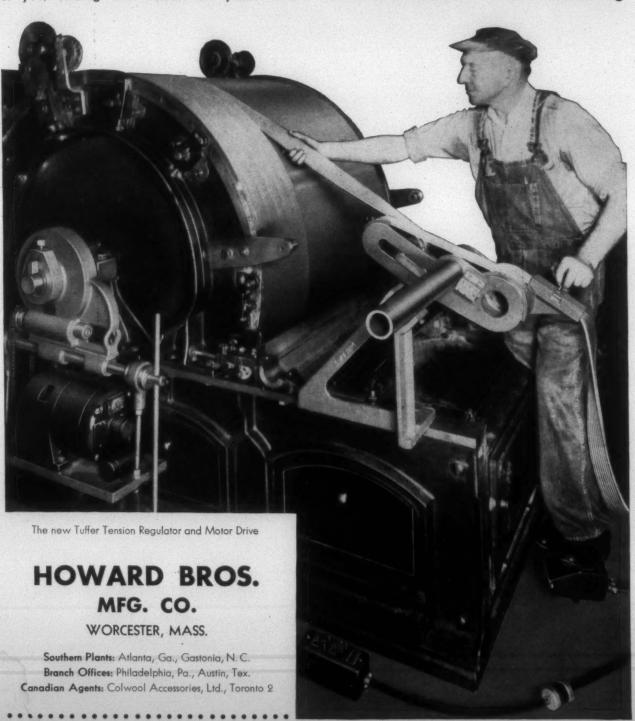
The uniformity and strength of yarns—to a large extent—determine operating efficiencies in the spinning and weaving rooms.

Proper carding is the *first step* toward strong, even yarns. Expertly applied and operated, Tufferized Card Clothing should materially improve the quality of your carding and increase the yield. It is

guaranteed uniform because it is made by our exclusive patented precision process.

Where else would this relatively small investment have such a widespread, beneficial effect?

#### **Use TUFFERIZED Card Clothing**



Lanaset\* resin for wool shrinkage control



SHRINKAGE CONTROL

SHRINKAGE CONTROL

UNDER BELISUIT PARTIES 872 368

THIS KNITTED WOOD FABRIC MAY

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THE RESTOR DIMENSIONS SENDED

ORIGINATOR SECONMARD

ORIGINATOR SECONMARD

FORMING INSTRUCTIONS.

WASHING INSTRUCTIONS.

# FIRST TO THE MILLS

#### FIRST TO THE CONSUMER

ANASET Resin is now first to bring to the consumer wool merchandise that has been made amazingly washable as confirmed by tests of independent textile laboratories.

CRESTLEE INC.
DONMOOR-DONBROOK
DORIAN-MACKSOUD CORP.
KORDAY SPORTSWEAR, INC.
LE ROY SHIRT CO.
McGREGOR SPORTSWEAR CO.

-these quality houses now offer LANASET
Resin-treated wool merchandise for immediate

sale. All such merchandise is identified by the LANASET tag—the assurance of hand washable woolens. Write for our Textile Finishing Bulletin 112.

## AMERICAN CYANAMID COMPANY TEXTILE RESIN DEPARTMENT

BOUND BROOK, NEW JERSEY

New York • Boston • Philadelphia
Providence • Charlotte • Chicago

LANASET\* Resin • SHEERSET\* Resin AEROTEX† Softener H • LACET† Resin

\*Reg. U. S. Pat. Off. †Trade-mark of American Cyanamid Company

## textile bulletin Plans a NEW EDITORIAL FEATURE

## You Name It - and Win \$25.00

SEE CONTEST RULES BELOW

To the Readers of TEXTILE BULLETIN:

Beginning with an early issue, this page will appear as a regular feature in Textile Bulletin. We believe that it will be useful to you as a clearing house for information, and as a place where you can air your views, if you have a mind to, on any matter, controversial or commonplace. Incidentally, it will help us by providing a space where we can publish the numerous letters, some complimentary, some that lay us low (and you can be sure that all of them will be printed) which come in from our readers.

We expect to break this feature down into general sections, among them:

¶ A "Question and Answer" section in which we will publish questions from the readers in one issue and publish answers by other readers in a later issue. A lot of the questions will probably be technical, but if there's some non-technical or controversial matter on which you want to get the opinion of other readers, send it along.

¶ A "Letters to the Editors" section which, frankly speaking, will serve as a "catch-all," and in which we'll publish the nice and not so nice correspondence which comes in daily.

Material from readers used in this feature will be edited properly before publication. You can either send in questions, or send in answers to questions as they appear in the magazine. Names of contributors will never be used unless we are specifically authorized to do so. Instead, we'll usually designate conributors by number for ease of reference.

The \$25 contest mentioned above is our idea of a good way to introduce the feature to you. If you care to enter the contest, just follow the simple rules outlined below.

Incidentally, if you have any suggestions, constructive or destructive, about how this feature should be run, we would appreciate very much your sending them in.

Cordially yours,

THE EDITORS.

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#### CONTEST RULES

For the best title submitted for this feature Textile Bulletin will award \$25.

The contest winner will be announced in the Nov. 15 issue of the Bulletin.

Titles submitted should be short, preferably less than six words.

Contestants may send in as many entries as desired.

In the event more than one person submits the prize winning title, duplicate prizes will be awarded.

Entries must be posted not later than midnight, Nov. 10, 1946.

Entries should be addressed to Field Editor, Textile Bulletin, P. O. Box 1225, Charlotte 1, N. C.

The blank below may be utilized if desired.

| eld Editor, Textile Bulletin O. Box 1225 • Charlotte 1, N. C. |                     |
|---|---------------------|
| y suggested title for your feature is                         |                     |
|   |                     |
|   | Name (Please Print) |
|   |                     |

# BORDERLINE VISION\*

May be hampering production in your plant!



down your workers.



better work.

#### Eliminate lighting handicaps' with Wheeler Skilled Lighting

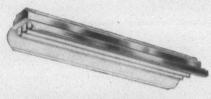
THE LIGHTING in your plant may look all right at a glance, yet be just a shade too dull or too bright in some places. Watch out!

That may mean that some workmen need two-looks-to-make-sure - and waste time. Or that they take chances on one look - and rejects. In either case production is hampered and costs go up!

Better work and reduced costs are practically automatic when you install evenly distributed shadow-free light, with efficient Wheeler Reflectors. Product of 64 years of specialized lighting experience, they are engineered to get maximum illumination from standard lamps; to stand up longer; to require less maintenance, for they are made of heavy-duty materials and high-grade vitreous enamel only.

Learn how Wheeler Reflectors and skilled lighting can bring you efficient lighting and cut your costs. Send for catalogs showing complete line of incandescent and fluorescent lighting fixtures. Wheeler Reflector Company, 275 Congress Street, Boston 10, Mass. Also New York, and principal cities.

Distributed Exclusively Through Electrical Wholesalers



#### All-Steel Open-End Fluorescent Unit

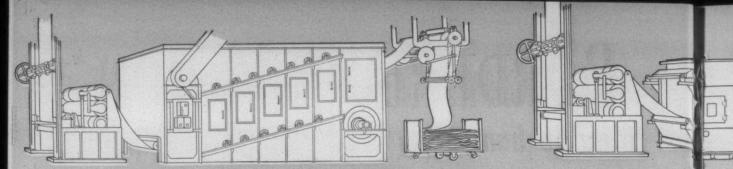
Available for two or three 40-watt, or two 100-watt lamps. Broad wiring channel with accessible, enclosed ballast. Mounts from chain or conduit, individually or in continuous runs.

#### RLM Solid Neck Incandescent Reflector

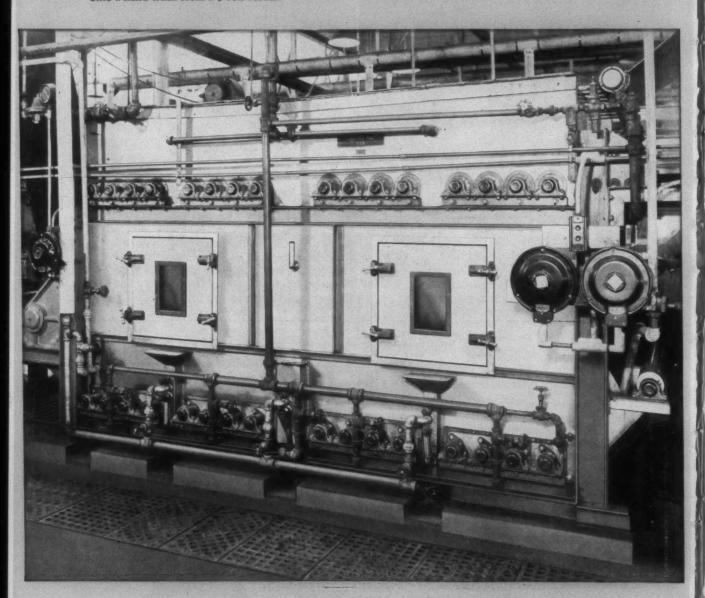
Maximum lighting efficiency for either indoor or outdoor use. Expertly designed, ruggedly built. 75 to 1500

# Wheeler Reflectors

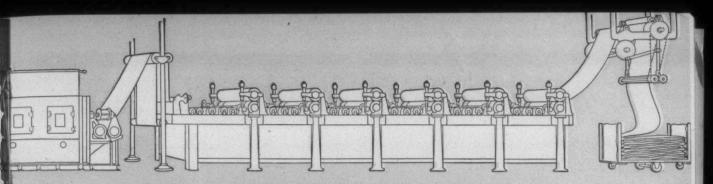
ECIALISTS IN LIGHTING EQUIPMENT SINCE 1881



In the first section of the Butterworth Vat Dyeing Range, goods enter a 3-roll padder in which the color is applied in pigment form, followed by drying on a special type air-dryer and folding onto a hand truck from a 3-roll folder.



The Steamer used in the Butterworth Vat Dyeing Range is one of the most efficient textile finishing machines ever produced. By liberating "live" steam in an air tight chamber, this machine assures penetration of the dye into the heart of the fabric, and more thorough color fixation than ever before possible. Cloth enters at top for straight steam processes. Cloth enters at bottom through a liquid seal for steam and liquid booster processes. Choice of cloth entrance depends upon process used to obtain desired effects.



In the second section of the Butterworth Vat Dyeing Range, goods are impregnated with chemicals on a 3-roll padder and then enter a steamer. (Note choice of cloth entrance—at top for straight steam processes or at bottom through a liquid seal for steam and liquid booster processes.) After steaming, goods pass through a water seal and squeeze rolls, and are washed in a 6-box washer, followed by folding onto hand truck.

# FAST SHADES AT 120 YARDS PER MINUTE WITH NEW VAT DYEING RANGE

Follow one yard of goods through the Butterworth Vat Dyeing Range . . . then compare the results with slow, one-step-at-a-time vat dyeing methods.

You will discover that the new vat-steam method of continuous dyeing produces fast shades at speeds ranging up to 120 yards per minute. You will see uniform color application in the pigment padder. You will see savings up to 25 per cent in dyestuff costs.

You will marvel at the thorough color fixation achieved with the Butterworth Steamer, the gentle, thorough efficiency of the Butterworth Compartment Washer.

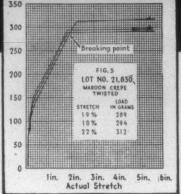
Find out today about the economies and increased production of the Butterworth Vat Dyeing Range. Write us.

## BUTTERWORTH

H. W. BUTTERWORTH & SONS COMPANY, Philadelphia 25, Pa.

TEXTILE FINISHING MACHINERY COMPANY DIVISION, Providence, R. I. • 1211 Johnston Bldg., Charlotte, N. C. • W. J. Westaway Co., Hamilton, Ont. • ARGENTINA: Storer & Cla., Chacabuco 443-49. Buenos Aires • BOLIVIA: Schneiter & Cla., Ltda., La Paz • CHILE: Schneiter & Cla., Ltda., Casilia 2864, Santiago • COLOMBIA: C. E. Halaby & Co., Apartado 139, Medellin • ECUADOR: Richard O. Custer, S. A., Quito • MEXICO: I. Slobotzky, Avenida Uruguay 55, Mexico, D. F. PERU: Custer & Thommen, Casilia 733, Lima • URUGUAY: Storer & Cla., Ltda., Calle Paysandu 1022, Montevideo. VENEZUELA: Herbert Zander & Co., Apartado Postal 1291, Caracas.

# Many tests-a picture of each 350 preach 350





Model IP-4 Incline-plane Tester for tire cords and other requirements up to 50 pounds tensile.



Model IP-2 Incline-plane light crepeage and tensile tester. Tests from single hair to 2,000 grams.

he many diverse models of \*Scott Testers provide for practically every needed physical test of textiles: tensile, hysteresis, twist, burst, crepeage, etc. Suitable equipment is available for the finest filaments; for rubber thread; for single end, skein, cloth, webbing, cords; from 0 to 1 ton tensile. Results are recorded in picturized form on handy reference charts.

Request Literature

### SCOTT TESTERS, INC.

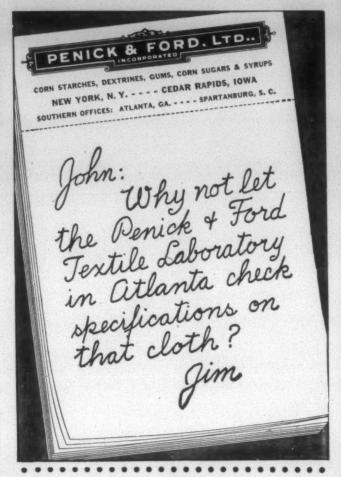
115 BLACKSTONE ST.

PROVIDENCE, R. I.

SOUTHERN JOHN KLINCK 304 FOREST AVENUE REPRESENTATIVE JOHN KLINCK AUGUSTA, GEORGIA

\* Registered Trademark

Standard of the World



# FOR Synthetics?

Now that synthetics are becoming increasingly available, it's time to check up on your facilities for handling them.

For improved blend identification, you'll find the equipment manufactured and sold by Frank F. Fuller offers the lowest-cost, most upto-date and most versatile method of applying fugitive tints. This is proved by the already widespread use of Fuller installations by foremost textile manufacturers throughout New England and the South.

In your own production, Fuller equipment will bring many new, important advantages to the processing of synthetic fibres. Write for complete information.

#### FRANK F. FULLER

Textile Spraying Equipment

831 Bailey Avenue, Elizabeth 3, New Jersey

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ANDOZ PRESENTS The color achievement of the month



## Future Heirloom

Reds of ruby and garnet . . . blues yarns. And it is a compliment to Sandoz to have such a leader as Lees and jade and topaz - these are the turn to Sandoz for colors that enrich colors of the East that inspire the dethese yarns.

signs of priceless Oriental rugs. All these fabulous colors . . . in the very designs of rare Orientals, Early American and Modern . . . are now brought, by Lees, to those men and women who find a fascinating hobby in creating hooked rugs.

of sapphire and turquoise . . . emerald

Sandoz congratulates James Lees & Sons Company, spinners of Minerva and Columbia Rug and Hand-Knitting

From Sandoz laboratories come dyes and chemicals that can be counted on for technical perfection and efficiency in handling. For example, the new Metomega Chrome Green BLL and Metomega Chrome Grey 2GL have extreme fastness to both mill and wearing conditions. They are ideally adapted to the simple and timesaving Metachrome method and are especially suited, because of their leveldyeing characteristics, for all wools.

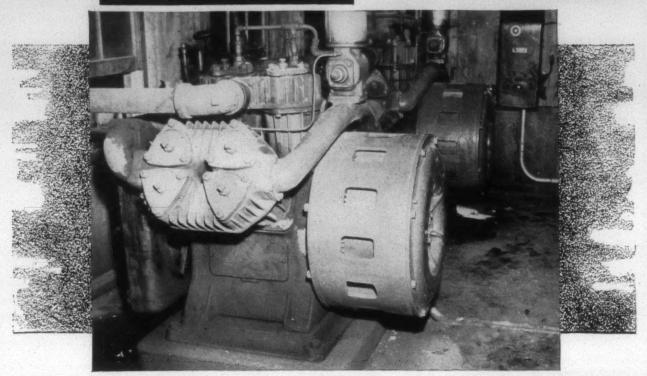
For acid, chrome or direct dyes . . . or auxiliary chemicals...for both natural and synthetic fibres...be guided by the successful "color achievements" you have been seeing in these Sandoz advertisements.

Sandoz application laboratories are located in New York, Boston, Philadelphia, Los Angeles, Charlotte, Toronto, where stocks in wide range are carried. Other branches are in Chicago, Paterson and Providence.

SANDOZ CHEMICAL WORKS, INC., 61 VAN DAM STREET, NEW YORK 13, N.Y.

thinks ahead with textiles

# For DEPENDABLE AUXILIARIES



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Vol. 71

October 15, 1946

No. 4



# Joanna Textile Mills Co. A Story of Progress

By DAVID CLARK

Shown at left is Walter Regnery with his spindle adapter.

T wasn't so long ago that the management of Joanna Textile Mills Co. was considering the transfer of its operations from Goldville, S. C., to Chicago, Ill., a move which would have placed the company near its affiliate, the Western Shade Cloth Co. When the possibility of this lock, stock and barrel move was made public the State of South Carolina, not wanting to lose an important member of its industrial family, got busy and convinced Joanna officials that they should stay put. This decision was a good thing for the South, and a good thing for its textile industry, for Joanna Textile Mills Co. today is one of the industry's outstanding and most progressive producers. Current projects at Goldville include a large addition to the manufacturing plant, a number of new and handsome houses in the mill village, an apartment building for employees, and the development of a remarkable spinning frame improve-

When the writer was at Raleigh, N. C., recently, Edward S. Reid of Sonoco Products Co. came into the office of Dean Malcolm E. Campbell of the North Carolina State College school of textiles with an aluminum gadget, which he called a "spindle adapter," and a long, straight-sided paper tube made by the firm. I could see that Ed was very enthusiastic about the aluminum gadget, and listened while he explained that he had been working on something similar until he found that Walter Regnery, assistant general manager of Joanna Textile Mills Co., already had developed an adapter and was having it machined by Transportation Equipment Co. of Chicago, Ill.

When I heard Ed Reid tell Sandy Campbell that by using the adapter and the straight-sided paper tube 42 per cent more yarn could be put on a bobbin between doffs, I decided that I should go to Goldville and secure more information about the development. It also had been some time since I had been to that community, and I knew that I would enjoy visiting W. A. Moorhead, Joanna's vice-pres-

ident and general manager and a friend of long standing. In addition, I knew that Joanna was engaged in an extensive expansion program which merited inspection.

The writer always connects the community of Goldville with an incident which took place there in 1901. A farmer named Blalock had established a small yarn mill which he called Banna Mfg. Co. My brother, W. A. Graham Clark, who for many years has been a textile expert for the United States Tariff Commission but at that time was learning the cotton mill business, was helping erect the Banna machinery.

One morning when Graham Clark was on his back fixing parts on a spinning frame, with only his legs sticking out, a second hand who had become angry about something took advantage of Graham's position and jumped on him. My brother restrained himself while in the mill, but during the lunch hour hunted for the man, found him at a store and gave him a rather severe beating. Although Banna Mfg. Co. had nothing to do with this private fight, Graham Clark was fired promptly. I have always remembered that incident at Goldville. Of course, Mr. Blalock and Banna Mfg. Co. have long since passed out of the picture, and it is unnecessary to say that no one now at Goldville had anything to do with the affair.

When I telephoned W. A. Moorhead that I wanted to visit Joanna along with Associate Editor James T. McAden, he asked us to arrive in time for lunch. We reached the mill at 1 p. m. and found that Mr. Moorhead, along with Walter Regnery and the cotton buyer, A. D. Barron, had already gone to the Moorhead residence. Mrs. Moorhead was away, but we nevertheless enjoyed an excellent meal, during which I did a little checking up on both Mr. Moorhead and Mr. Regnery.

W. A. Moorhead was born in the country near Union, S. C., and attended a business college at Atlanta, Ga., where he learned bookkeeping and typing. When he completed his studies there he was offered a job in an Atlanta bank, and worked there for one week. Wishing to live in South Carolina, he went to Columbia and by accident met one of the bankers who were handling the Banna Mfg. Co. finances, then in pretty bad shape. Young Moorhead was sent to Goldville as an office clerk, and when reporting for work found that George M. Wright was the manager. George Wright also was just starting his career in the textile industry. (About two weeks ago George Wright resigned as president of Republic Cotton Mills at Great Falls, S. C., and retired from cotton manufacturing after a long career, during which he was always regarded as one of the industry's leaders.)

What once was Banna Mfg. Co. with 5,000 spindles now is Joanna Textile Mills with 103,176 spindles and 2,892 looms. In 1928 Western Shade Cloth Co., owned principally by W. H. Regnery and members of his family, and the Hartsorn Co., another producer of shade cloth, purchased the mill at Goldville. In 1937 Western Shade Cloth purchased the Hartsorn stock.

At the beginning of World War II, young Walter Regnery was engaged in mining operations in the Northwest, but finding it impossible to carry on, decided to spend a short time at the Goldville plant. He knew nothing about cotton manufacturing, but liked the business and soon forgot about his mining career. He is now building a very handsome home at Newberry, S. C., and he and his wife are very popular with people of the Newberry-Goldville-Clinton section.

When Walter Regnery came to Joanna about four years ago Mr. Moorhead assigned him to making studies of methods of reducing cotton waste. His ability on this project soon became evident, because savings resulting from his studies not only were practicable but made possible a substantial dividend to the stockholders. About two years ago he turned his attention to getting more yarn upon warp bobbins, and thereby reduce doffing and spooler costs. He realized that to put more yarn on a bobbin it would be necessary to drop the rail and use a longer bobbin.

Going on this assumption, Walter Regnery conceived the idea of building up the spindle enough to receive a long, straight-sided paper tube by fitting an aluminum shield over the spindle blade. He found that the idea worked. By using the Joanna adapter, as the invention has been named, it was found that the conventional type spindle can be utilized in changing over to the larger package. The aluminum adapter, as shown in the accompanying pictures, fits over the steel spindle and over this is fitted the treated paper tube. The adapter costs from \$1.25 to \$1.50, whereas a new spindle for use with the larger bobbin would cost about \$3.50.

Use of the larger bobbin increases the amount of yarn that can be wound on one bobbin up to 42 per cent. In

other words, the new and large bobbin will handle about 5,900 yards of 30s yarn as compared to about 4,028 yards for the smaller wooden bobbin. The new bobbin is 9 by 7/8 compared with 6 7/8 by 7/8 for the conventional type. The new bobbins are doffed every ten hours as against seven hours and 20 minutes on the older type.

In many mills the bobbin holders on Barber-Colman spoolers have to be changed to take the longer bobbin, but I understand that in the future all Barber-Colman spoolers will have holders sufficiently large.

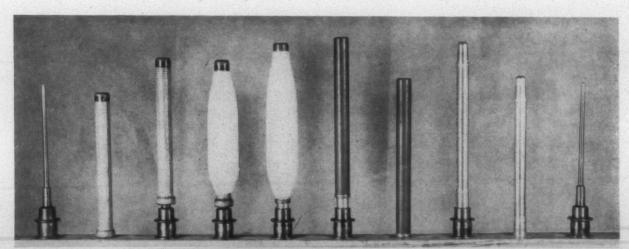
Walter Regnery claims that the saving in doffing and spooling will pay 30 per cent on the investment required to purchase the adapters and lower the spindle rails, not taking into consideration the saving in waste upon the spoolers. He also says that with straight-side paper tubes over adapters there is a reduction of 50 per cent in ends down per hour.

We went up to the main spinning room to see these adapters in operation on spinning frames (3½-inch gauge, 1 7/8-inch rings). We found that Superintendent Joe L. Delaney and Spinner W. K. Wait were very enthusiastic. There were three other types of spindles and bobbins operating near the frames equipped with adapters and straight-side paper tubes. The thing which impressed us most was that whereas the tops of the bobbins on the conventionally set up frames were irregular, some being half an inch higher than others, the tops of the bobbins on frames equipped with adapters made a straight line and very few, if any, were as much as an eighth of an inch higher or lower than the others.

Walter Regnery claims that his adapter has the right principle, in that the bobbins are driven from the top instead of from the acorn (or bottom) of the spindle. He says that it is much easier to plumb spindles equipped with adapters. Adapters can be put on any spindle blade if bored for them, but Walter advises having the top of blades cut off before the adapters are fitted.

Use of the spindle adapter is an obvious advantage to any yarn manufacturing plant, but as pointed out to us, it will be of great value to sales yarn mills which do their winding on conventional Foster or Universal units.

While in the spinning room we were interested in the new system of air conditioning and control installed recently by the Bahnson Co. of Winston-Salem, N. C. The Bahnson Humiduct is serving in the majority of rooms to main-



First four items, left to right, show convention spindle and bobbin arrangement. Remaining six items, right to left, show application of the spindle adapter and paper tube.

# In electric motors— it's <u>Staying Power</u> that counts!

AN electric motor demands lubrication with the same "staying power" that's built into the motor itself.

And that's not as simple as it seems! Take this ring-oiled bearing, for instance. The oil you see must be of correct fluidity, so that it may easily be picked up by the ring and distributed rapidly over

the bearing. But—most important—it must stay that way! Even though it's used over and over again, it must not thicken so that ring action is retarded, or form deposits that may stop the ring and starve the bearing.

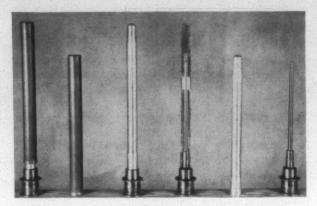
You'll find this "staying power" in Gargoyle Vacuoline Oil Heavy

Medium. It has unusual chemical stability—resists change and keeps its rich lubricating qualities through long periods of use.

For grease-lubricated electric motor bearings, the same reliable performance is offered by Gargoyle Greases BRB.

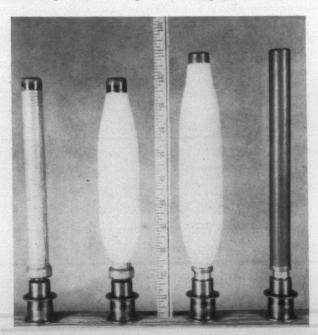


tain the proper conditions for manufacturing and worker efficiency. The Humiduct is a completely self-contained unit that combines the functions of humidification, ventilation, cooling and heating in a unit system of air conditioning.



A cutaway illustration of the spindle adapter is shown fourth from left.

The basic unit of the Humiduct consists of a centrifugal type evaporator, axial flow fan and distribution duct. When equipped with a fresh air intake, this basic unit provides ventilation as well as humidification. To proportion the amount of fresh air and recirculated air drawn into the system, the intake is provided with fresh air louvers and recirculating louvers that are automatically operated. As the room temperature rises, the fresh air louvers open to allow outside air to enter while the recirculating louvers simultaneously close. As the air is drawn through the evaporator unit, it is mixed with the atomized water which has been broken up by the centrifugal evaporator. The Bahnson Master B humidity control maintains the desired relative humidity by varying the amount of water fed to the surface of the spinning disc of the evaporator. With controlled ventilation and controlled humidification, controlled evaporative cooling results. When the Humiduct system is started up, there is a drop in room temperature because of



This is a graphic comparison of package size obtained with spindle adapter (right), and that with conventional set-up (left.)

the absorption of room heat required to evaporate the moisture. When the humidity reaches the desired level, and the control stops the introduction of moisture, heat is no longer absorbed. As heat is still being produced in the room, ventilation is required or the air will soon grow warm again. Therefore, the correct air change per hour has been calculated for the various sections to bring in fresh air and exhaust the warm humid air so that more water can be evaporated without raising the relative humidity too high.

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Effective cooling is further enhanced by air movement. The Humiduct system utilizes the principle of "positive circulation" with a resulting increase in effective cooling of up to three degrees effective temperature. Providing outlets on only one side of the distribution duct produces a flow of conditioned air down one side of a room and back up the other. This type of distribution is particularly effective in breaking up the tendency of air stratification caused by concentrated heat loads which leaves a cool highly humid condition near the ceiling and a poor condition at the working level. Concentrated heat loads are found in most textile



The new manufacturing wing recently put into operation by Joanna.

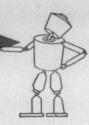
plants as individual motor drive for machinery is generally used, and the close spacing of the machinery will often leave narrow motor alleys. By blowing the air down these alleys, the desired condition can be best maintained at the actual level of production. To do this the air must be distributed in such a manner to absorb the heat where it is produced and contain sufficient moisture to maintain the desired humidity.

With a system that delivers only saturated air, it is necessary to use the air as a conveyer of the moisture. The Humiduct, however, in addition to delivering nearly saturated air also employs the principle of delivering entrained moisture. This entrained moisture is broken up so fine that it is quickly evaporated by the room heat. This method allows humidity conditions to be met without requiring the amount of air that would be required if only saturated air were used. By reducing the air handling requirements in this manner, a considerable saving in operating costs is obtained.

Because the Humiduct is a completely self-contained unit, it offers maximum flexibility and design to the air conditioning system. Humiduct units may be added to meet changing conditions, or if it is necessary to stop one of the

## GETTING THE MOST FROM WI

Information about winding designed to show improvements in winding equipment and new ideas in the winding operation



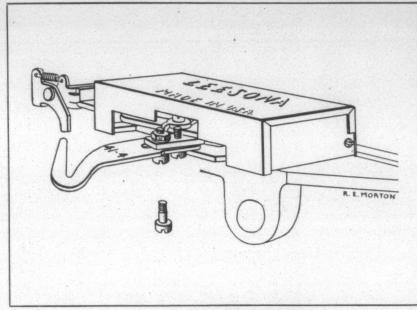


Fig. 1 Attaching Bunch Builder Thread Guide

#### ATTACHING BUNCH BUILDER THREAD GUIDES (No. 90 Winding Machine)

A new Thread Guide Screw (SC-7941) has been developed to eliminate the danger of the screw loosening and allowing the Thread Guide to get out of adjustment.

The body of this screw is made a very close fit for the slot of the Thread Guide, so that there can be no "play" of the Guide. The screw is threaded so that it is a snug fit in the hole of the Thread Guide Arm.

Both screws used with the Bunch Builder Thread Guide are provided with a lock washer placed under the head of each screw, and the outer screw has a tight-fitting nut with a lock washer under it. (The inner screw does not have a nut.)



#### HOW TO FIGURE SPINDLE SPEED ON PRECISION WINDING MACHINE

Even though you don't have a speed indicator, you can still determine the spindle speed on a precision winding machine, easily and with reasonable accuracy, by using a watch and your finger.

Place the finger at some point where a reciprocating part will touch it lightly at the end of each stroke. Count the number of strokes per minute, multiply by twice the number of winds being used, and you will have a figure approximately equal to the spindle speed.



Fig. 2 Figuring spindle speed without use of speed indicator.

\*Reg. U. S. Pat. Off.

September 1946

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## WINDING COMPANY

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units, the complete system is not shut down. In engineering the various room requirements, the capacity of the system may be concentrated over the higher heat load areas thus permitting an accurate balancing of the system in accordance with the varying requirements within the room. The Humiduct is mounted completely within the room to be conditioned. Apparatus houses, special bracing of floor or roof, or other major alterations to accommodate the system are not required.



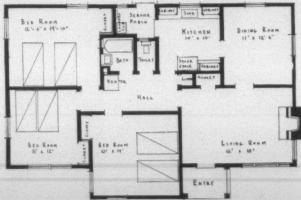
A block of the new houses in the Joanna Textile Mills Co. village at Goldville, S.  $C_{\rm c}$ 

For winter operation, heat is provided with the Humiduct by mounting a heating section over the recirculation opening of the Humiduct intake. Thus, as the air within the room drops below the desired level, a thermostat, which operates in conjunction with the automatic damper control, regulates the flow of steam to the heating section.

We left the spinning room and went to the mill's machine shop to see a demonstration of adapters being put on spindle blades by a simple process of downward pressure. While there we met the new master mechanic, Carl Franzer, who recently came from a machine shop at Chicago. We then went to the plant's testing laboratory and were shown around by James P. Sloan, who is in charge of that department.

We made special inquiry about the use of cotton slasher blankets which were developed at Joanna about five years ago and found that Mr. Moorhead and his associates have lost none of their original enthusiasm for them. They say that the cotton slasher blankets last 12 to 14 weeks as against three weeks for the woolen blankets formerly used, and assert that they do just as good if not better work.

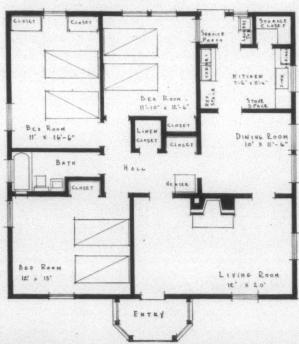
Joanna Textile Mills Co. has recently completed a fourstory addition to its plant, the first step in a \$2,150,000 expansion program. Engineered by Lockwood-Greene Engineers, Inc., of Spartanburg, and erected by Daniel Construction Co. of Greenville, the addition contains 90,000



Above is the floor plan for House No. 2. Architect Irvin calls this his favorite design.

square feet of floor space. It is of brick and steel construction, with glass block windows. Included in the present expansion program is the purchase of new machinery costing about \$1,150,000, which has increased the number of spindles from 89,928 to 103,176. Also 50 three-bedroom brick tile houses and a 24-family apartment building are being constructed for the mill village.

After lunch and prior to visiting the plant, Mr. Moorhead and Walter Regnery drove us over the Joanna village, of which they are rightfully proud. The new houses were designed by Willis Irvin, architect of Augusta, Ga., and are being erected by J. A. Jones Construction Co. of Charlotte. They are about the best mill village houses this writer has ever seen, being complete in every detail and containing unusually fine kitchen equipment. One especially fine feature are the prefabricated built-in closets. We looked over plans for the very well designed apartment house, upon which construction has been begun. We also visited the club house for employees and heard its lady manager describe with enthusiasm about the services it renders to employees of Joanna Textile Mills Co.



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Floor plan for House No. 5 in Joanna's village. Architect is Willis Irvin of Augusta, Ga.

W. A. Moorhead and Walter Regnery were so proud of the mill village, the new houses, the apartment project and the club house that it took up a long time to get around to the real purpose of our visit—the adapter. We left Goldville with the feeling that Walter Regnery had hit upon an excellent idea when he developed the aluminum adapter, which is being made by Transportation Equipment Co. at Chicago and distributed by H. Philip Worth of Greenville.

Negotiations for the merger of Pantasote Co. of Passaic, N. J., with Textileather Corp. of Toledo, Ohio, were concluded recently, according to a joint announcement. The new corporation, to be known as Pantasote Plastic, Inc., will be one of the nation's major producers of artificial leathers and a leading independent manufacturer of plastic-coated fabrics and vinyl resin film.





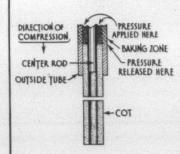
# eliminates eyebrows

Spinning and roving tenders spend less time picking clearers when you equip your frames with Armstrong's Cork Cots. These superior roll coverings not only produce a minimum of clearer waste, but their extra friction carries this waste well back onto the clearer boards. No eyebrowing occurs,

The resilience and uniformity of Armstrong's Cork Cots result in fewer ends down per thousand spindle hours, so your operators do less piecing up. These cots also recover quickly from most laps or hard ends. And because these cots are seamless, they have no hard or soft spots to grip the yarn unevenly.

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Armstrong's Cork Cots have no structural weakness to cause premature breakdown. Each cot is uniform in density from inside to outside, from end to end. As a result, each compresses evenly, spins stronger yarn, lasts longer.

BETTER RUNNING WORK

- MORE POUNDAGE

ARMSTRONG'S CORK COTS

ACCOTEX COTS . ACCOTEX APRONS



Col. B. H. Warren, left, and Col. C. S. Irvine, scheduled to fly the B-29 Pacusan on its attempted 10,000-mile non-stop flight from Oahu, Hawaii, over the North Pole to Cairo, Egypt, examine pliceel tanks, lightweight rubberized nylon fabric fuel cells installed by J. A. Bernel, center, aeronautical engineer for Goodyear Tire & Rubber Co. The cells make possible a weight saving of almost 3,000 pounds.

#### Proper Diet Will Protect Workers

Proper diet can help to protect workers from industrial illness, medical investigation indicates. Industry handles many materials, including solvents and nitrated and chlorinated chemicals, which may, if carelessly used, affect the liver, kidneys, blood and other organs of the body. Safe working conditions are, of course, the primary means of protection from illness. However, illness is much less likely to occur among workers whose diet is adequate in proteins, minerals and vitamins. The protective value of a balanced diet may be seen from the following incident. An outbreak of illness occurred among a group of women handling an organic solvent. Those who became ill had been living on a diet high in fat and containing little protein and few minerals; those who remained unaffected had been eating a more balanced diet.

Milk is said to be a particularly valuable protective agent, since it is rich in both protein and minerals, especially calcium. Experiments with animals have shown that those on a diet low in calcium are more seriously damaged by liver poisons than those on a high calcium diet. Moreover, many individuals affected by industrial chemicals have been cured by treatment with calcium and protein products. Some authorities advise that workers handling lead or other metals, chlorinated solvents, or hydrofluoric acid should be instructed to drink a quarter of milk a day.

Various vitamins are believed to be important protective agents against one or another of the industrial chemicals. It is therefore recommended that the diet be adequate in vitamin-rich foods, such as fresh fruits and vegetables. In some

plants, specific supplements are supplied, on recommendation by the plant physician. Alcoholism greatly increases the susceptibility of the individual to chemical poisoning, and employees should be warned accordingly.

Although allowance must be made for varying conditions, the most generally recommended diet for workers handling potentially harmful chemicals is one which is low in fat, high in protein and carbohydrates, and adequate in minerals and vitamins. The safety education program for personnel employed in chemical departments may well include information on proper diet as a factor in the safe use of industrial chemicals.—Safety Research Institute.

#### Fat and Oil Scarcity To Continue

More promotion and pressure must be put upon the public to emphasize the critical shortages in fats and oils which will continue "a good long time," E. A. Meyer, deputy administrator of the Production and Marketing Administration, Department of Agriculture, stated recently. In 1942, Mr. Meyer pointed out, our civilian use of fats and oils, per person, was about 71 pounds, dropping in 1943 to 67 pounds. In 1944 it was again about 67 pounds. "Last year it dropped to 64 pounds, and preliminary estimates for this year place per capita use at 62 pounds—the lowest since the depression year of 1933," he said.

"These figures represent fats and oils for both food and non-food use. Food use of fats and oils has declined from 45 pounds per capita in 1942 to 39 pounds in 1946. While non-food use of fats and oils has remained fairly constant over this period, civilians have noticed the shortage in that direction, too. In the case of fats used in soap, for example, per capita use in 1942 was about 14 pounds. Preliminary estimates place use this year at about 11 pounds," Mr. Meyer announced. "Will this unhappy fats and oils situation be corrected at any time in the near future? I can tell you—bluntly—that it will not. There is very little prospect for any significant improvement in the fats and oils picture for a good long time."

#### W. A. A. Says Surplus Fabrics Selling Fast

The War Assets Administration has announced that between July 10 and Aug. 17 it disposed of approximately one-third of the 7,373,383 yards of surplus cotton, woolen and worsted fabrics offered for sale under a direction issued by the Civilian Production Administration to help relieve the acute shortage of men's clothing.

W. A. A. officials said that three kinds of cloth were over-subscribed—interlining (cotton sheeting), unbleached drill and poplin—and that next largest demand was for balloon cloth and osnaburg. These materials are used as components of suits and overcoats. Lack of these parts is reported to have constituted a bottleneck in the industry, holding up completion of many suits and overcoats.

Least in demand were the woolen cloths. This was attributed to the fact that clothing fabricators generally have on hand a supply of such cloth in excess of what they are able to process into finished suits or overcoats due to bottlenecks at garment manufacturing level resulting from shortage of labor, rayon linings and other vital component parts. They said that some potential purchasers might have failed to buy because of the 120-day time limitation for completion of the suit or coat.

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# South Carolina S.T.A. Devotes Fall Meeting To Study of Plant Safety

MORE than 200 textile plant operating executives, including approximately 30 officials in charge of safety and personnel work, gathered Oct. 5 at Clemson, S. C., for the fall meeting of the Southern Textile Association's South Carolina Division. The meeting, held in the Clemson College textile school building, was devoted altogether to study and discussion of plant safety programs and featured a

number of prepared papers on that subject.

Presiding at the meeting was J. B. Templeton, superintendent of the Brandon Corp.'s Poinsett Mill at Greenville, S. C. He was assisted during the first half of the program by J. L. Adams, superintendent of Beaumont Mfg. Co. at Spartanburg, S. C., and during the second half by Newton G. Hardie, general manager of Laurens (S. C.) Cotton Mills. An election held just after the meeting began resulted in the choice of Robert T. Stutts, superintendent of Easley Cotton Mills at Liberty, S. C., as chairman of the division's weaving section, succeeding Mr. Hardie.

Published below are the papers which were presented as part of the program; discussions which followed each paper

also are printed.

## Accident Frequency As Related To the Accident Problem

By C. A. ANDERSON, District Claims Manager American Mutual Liability Insurance Co., Greenville, S. C.

THE importance of accident frequency in your business may be illustrated by paraphrasing the now broken political axiom, "As goes Maine, so goes the country." I believe it may be truthfully said that "As goes accident frequency, so goes your problems and costs." You may reduce accident costs and insurance rates, and improve your production and labor relations by controlling accident fre-

quency.

Present conditions indicate it is almost imperative that this problem be given careful consideration and prompt attention. What are some of these conditions? Here in South Carolina we have a delicate political situation with a liberal workmen's compensation act and a more liberal administration of that act, which results in high accident costs and high insurance rates which in turn depreciate your ability to compete with like manufacturers in neighboring states where these conditions are more favorable. In considering national conditions there is the advent of new materials, particularly rayon, nylon and other synthetics. It has even been publicized that chicken feathers may soon be used in textile fabrics. The movement of the textile industry from the North and East to the South continues unabated and these conditions will create increasing need and competition for the good labor that makes good production. Good workers are safe workers and prefer to

work in safe mills. Internationally we have not had any textile competition for several years, during which time our production costs have increased tremendously due to increased cost of materials and labor. It is not improbable that before the peace conference has terminated that tariffs may be reduced. So looking ahead a very few years we may visualize increasingly serious problems in our foreign markets. If I paint the picture darkly it is only to illustrate that these conditions may result in a situation where only the fit will survive.

To overcome these problems we must obtain maximum production at minimum cost and this can be achieved by the control of accident causes and accident frequency. It is appreciated that this is a broad statement and that it needs explanation which may best be accomplished by considering the prime causes of accident frequency. Improper selection and placement of personnel, poor plant physical conditions, inadequate supervision and lack of proper records not only cause accidents and high accident costs but also result in high labor turnover, poor labor relations, loss of production and increased costs. Therefore, correcting the causes of high accident frequency will not only reduce accidents but will also increase production and lower costs. Two large South Carolina textile groups have recently proven the truth of this statement. In was neither accident nor coincidence that under the war conditions of 1944 and 1945 both the Brandon Corp. and the Graniteville Co. reduced accidents and improved production. The cause was removed, the effect followed.

One authority illustrates accident frequency by means of a pyramid. The base is formed by 300 non-injury producing accidents. On the base rests 29 accidents resulting in minor injuries, and at the top is one serious accident and injury. Therefore it is necessary to record and study all accidents to reduce the number of serious and costly accidents. Unrecorded accidents do not receive accident prevention attention and may not receive first aid treatment resulting in infection, loss of time and permanent disabilities. In the cloth room of one finishing plant it was found that they were having about 25 needle punctures per month as the result of hand-sewing covers on bales of cloth. The supervisor pointed out to his employees the potential loss to them from their unsafe practices and the needle punctures were reduced to an average of five per month. If the high 25 per month average had continued it would inevitably have resulted in infections with their resulting economic loss. A few cases from my own experience will well illustrate how small accidents result in major losses. A woman received a thread cut on the end of one finger. It became infected, she lost her arm, the mill lost \$3,500 in compensation costs and a good worker. A loom fixer's wrench slipped and his knuckle was skinned, infection followed with a 50 per cent loss of the hand and a compensation of \$3,-000. A box fell on a woman's foot, the foreman knew of the injury but did not send her to a doctor and she continued to work for a month. The end result was that a good employee and mother became permanently and totally disabled and the compensation and medical cost to the employer was over \$7,000. Each of these minor accidents resulted in the most serious injury during the employer's policy year. Surely the little accidents make big injuries. Let us see if the same thing holds true where major injury immediately follows the accident. A roving hauler thought he was pushing his box on an elevator, instead both he and the box fell down the elevator shaft and he was dead when the doctor arrived. The elevator gate had been left open many times before and on each of those occasions a potential accident occurred. In another case an employee stepped on a bobbin and fell, breaking his leg. Each time a bobbin was accidentally dropped or fell to the floor it was an accident but injury did not occur until this unfortunate man stepped on one of the bobbins. So even the serious injury is usually the product of many small accidents. Only by striving to eliminate all accidents can the full fruits of accident prevention be obtained

Einstein's theories and insurance rate making seem to have this in common that they are seldom understood by the average man. So it may be well to review a few facts about accident losses and their effect on insurance rates. By determining the normal or average expected loss and adding thereto proper loadings for taxes, expenses and profits a base rate is established for each industry. From that point on each employer makes his own individual rate according to whether his losses are less than or in excess of the normal expected loss. The difference between a good experience and a poor experience may amount to as much as \$1 per \$100 of payroll. In addition to your insurance cost there is still another or hidden cost which the National Safety Council has computed to be in ratio of four to one as compared to losses. These hidden losses, which frequently are not given consideration, are comprised of damage to equipment, damage to material, loss of production and so on. If you wish to determine your actual loss due to accidents for any given year, determine the dollars spent for compensation and medical and multiply by four. The result may be both surprising and alarming.

Since the four to one ratio was established a new expense factor has been created — unemployment compensation. This new piece of social legislation can cost from a minimum of \$1.20 to \$4 per \$100 of payroll according to the rate of labor turnover. In this instance the differential between good and bad experience may be as great as \$2.80 per \$100 of payroll, and as previously pointed out, high accident frequency and high labor turnover are due to the same causes. Combining the possible savings on compensation and unemployment insurance, as much as \$3.80 per \$100 of payroll may be saved. Is that a worthwhile saving?

We Americans are a sports-loving people and so we like sports analogies, so it is at least seasonal to consider what makes a winning football team. Players are selected for their physical and mental abilities, they are carefully placed and tried in various positions, they are furnished with physical safeguards, given individual training and training in team work, and, last but not least, morale is carefully cultivated. When all these things are well done we have a winning team. Industrial supervisors have their teams to coach and by applying the same technique to the control of accident frequency you, too, can have a winning team.

#### DISCUSSION

MR. TEMPLETON: Do I understand from your paper, Mr. Anderson, that there is a definite ratio of all accidents to every major accident?

MR. ANDERSON: Yes, sir, that understanding is correct. To every 30 accidents that result in lost time or need medical aid there is one serious and costly accident. As you reduce the number of accidents, of course, mathematically the number of serious accidents decreases with the total.

MR. TEMPLETON: And your serious accidents can be controlled in number by the reducing of all accidents. Is that right?

Mr. Anderson: Yes. Experience has proven that.

MR. A: Do you have the figures as to how many minor accidents there would be, that do not require a doctor's attention or result in loss of time, until you can expect a lost-time accident? Do you know that ratio? You have given us, I believe, a ratio of one serious accident to 30. Is that including all accidents or the ones in which the employee would require a doctor's attention when you say 30 accidents until such time as you would have what is termed a serious one?

MR. Anderson: Those are primarily the accidents that require a doctor's attention or result in lost time.

MR. A: Now, taking the scratched finger, the minor bruise, the skinned knuckle, how many of those could you expect to have happen until you run into a serious one?

MR. ANDERSON: I am sorry, sir, but I do not have any figures on that. I have not done any research on it, and from my studies I do not think anyone has published any figures or results of research on that particular phase. From the first-aid figures in many mills, however, on the cases requiring first aid which do not require the aid of a doctor or result in lost time, there is a ratio of 400 or 500 of those cases to 30 or 35 or 40 cases that do require medical attention or result in lost time. Perhaps that will throw some light on it. The medical department of my home office recently informed me that approximately 80 per cent of all accidents did not result in need of medical attention or lost time.

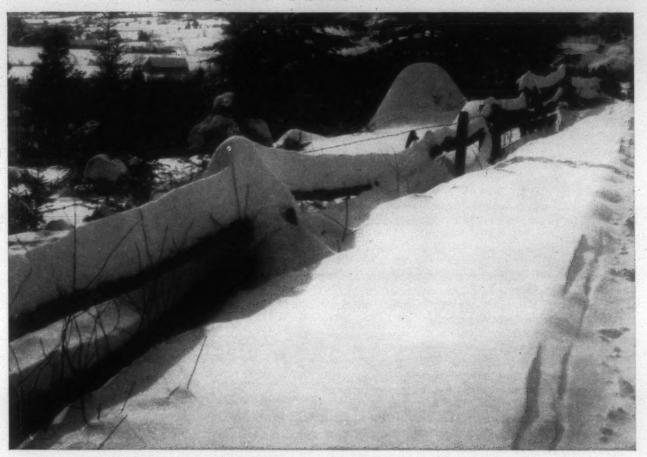
#### Systematic Records and Followup In Accident Prevention Work

By A. C. PHELPS, Personnel Director Brandon Corp., Greenville, S. C.

YOU all have heard many times of the humanitarian considerations involved in accident prevention, of the social gains to be made when needless loss of earning power on the part of the industrial worker is prevented. History teaches us that there are two, and only two ways of learning and progress. One is the hard way of personal experience. Such is the way of the pioneer, the scientific researcher who explores new and untrodden horizons of knowledge, and alas, it is also the way of the man who fails to apply reason. The other way is the way of the organized thinker who takes advantage of the recorded experience and knowledge of others who have traveled the same pathways before him. It is a much, much easier way. When I was a schoolboy, we learned to write by use of copy-books which consisted mainly of maxims from Poor Richard's Almanac;

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#### Will Not Discolor White Goods In ANY Concentration

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Other notable advantages are as follows:-

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- Give a velvety soft finish with a firm full hand.
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- Produce non-greasy, odorless finish, which will not discolor or develop odor with heat, age or light.
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- Mix readily with starches, most gums and many other finishing materials.

#### AHCOVEL E

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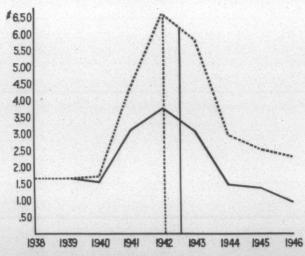
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one of those maxims is still distinct in my remembrance. It reads, "Experience keeps a dear school, but fools will learn in no other."

Today, therefore, my time here will be devoted to detailing the experience of our organization in accident prevention work upon both an organized and unorganized basis, and in commenting upon the basic considerations which lead us to adopt the present systematic scheme of records and follow-up. As my exposition unfolds, I am satisfied that the value of systematic records and follow-up will be amply demonstrated and that the purpose will be made utterly clear.

So that you may see as well as hear, I have prepared a chart which details our experience from Nov. 1, 1938, to date. The top line represents the workman's compensation cost per 1,000 hours worked, by years. I chose this measure because it is one of the factors by which the work of every supervisor is judged—the factor of cost. Furthermore, it is something to stick your teeth into, instead of something abstract or intangible. You will note that the cost of workman's compensation payments per thousand man-hours worked was as follows: 1938-39, \$1.67; 1939-40, \$1.73; 1940-41, \$4.40; 1941-42, \$6.57. I now call your attention to the vertical line, at left, which represents the time when organized personnel work began with us. This consisted of systematic selection as far as manpower shortages would permit, weeding out the physically and morally undesirable applicants for jobs, and the keeping of careful records of work habits as evidenced by attendance, sicknesses, warnings for poor work, and so forth. Then, after the preliminary work of organizing employment and personnel system and records was over, the accident prevention program was begun. Accident prevention, since it is mainly a personnel problem, is properly assignable to the personnel department. So in July, 1943, organized follow-up of disabling accident cases was begun. At that time careful attention was paid to co-ordination of the work of insurance carriers, doctors, supervisors and investigators. The main object of this was to eliminate as far as possible faked injuries and exorbitant claims, of which we were convinced there were many. Along with this program went training



The chart above shows the progress made by Brandon Corp. in accident prevention work from Nov. 1, 1938, to date. Dotted line at top represents workmen's compensation cost per 1,000 hours worked, by years, and how it was reduced by accident prevention. The solid horizontal line reveals the reduction of accidents effected by the campaign. The vertical line at left (dotted) shows when organized personnel work began at Brandon Corp., and the one at right (solid) when the accident prevention program was started.

of supervisors in their part of the investigation and followup of accidents.

The first part of our program was mainly designed to rebuild the confidence of supervisors in higher executive backing on their disabling accidents. Otherwise they were bound to feel that preventive measures were of small import. Why prevent accidents when any worker could fake a claim and collect, or collect twice or three times the going legal rate for a given injury? And this part of our program did bring immediate results. For the years 1942-43, our compensation cost per thousand man-hours fell from \$6.57 to \$5.79, or 12 per cent, despite a wage rise of 15.4 per cent. And at this point, allow me to observe that the average weekly wage determines the dollar and cents paid for a specific injury, because for example, the loss of a thumb is and has been fixed at 60 weeks of compensation. Therefore an average weekly wage of \$20, which gives a compensation rate of \$12 weekly, means payment of \$720 plus disfigurement, for loss of a thumb, while an average weekly wage of \$30, which produces a compensation rate of \$18 weekly, means payment of \$1,080 plus disfigurement for loss of the same member. So as I see it, we had a reduction of injury that year amounting to 27.4 per cent.

Our next step was to examine into all the knowledge of the causes of accidents that we could, and to try to ascertain what were the fundamentals of accident prevention, so that we could, by taking advantage of the knowledge of others and their experience, formulate a practical, effective system for ourselves. And at this point, allow me to observe that the knowledge and experience of others was systematically recorded; otherwise, we would not have been able to gain except by our own costly experience. From these studies, we arrived at certain conclusions which are detailed hereafter, and upon which our system of accident prevention is based:

(1) Accidents are caused—they do not just happen.

(2) Eighty-eight per cent of the accidents are caused by human factors, 12 per cent by mechanical factors, mainly. About two per cent are unavoidable by the use of ordinary precautions.

(3) The same cause that produces a relatively minor injury, such as a broken finger nail, may also result in such major injury as amputation of a finger, hand or arm, or even death.

(4) Prompt and efficient first aid is absolutely necessary to prevent infections with their train of lost time and permanent injury.

(5) Certain safety rules are necessary for control of personal causative factors.

(6) Decrease in accidents is invariably accompanied by increase in quantity and quality of production; therefore, by decreased cost of production in addition to decreased cost of accidents themselves.

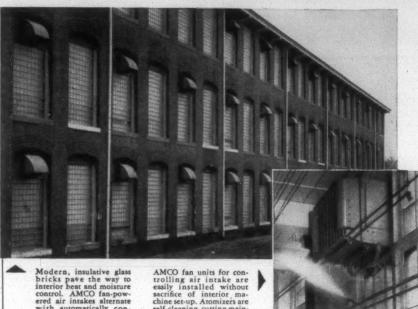
(7) The best way to engender safety consciousness in employees is to show them by positive action that you intend to remedy dangerous conditions immediately they are reported.

(8) Persons failing to observe ordinary precautions or safety rules in their work should not be reprimanded in such fashion as to engender resentment, but should be *sold* upon the value of safe working habits to themselves, their families, and other workers; but such persons as resist unduly this process, simply have no place in the organization.

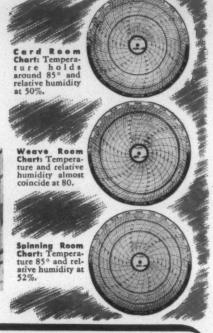
(9) Some persons are naturally accident-prone, by reason

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Modern, insulative glass bricks pawe the way to interior heat and moisture control. AMCO fan-pow-ered air intakes alternate with automatically con-trolled vents.



NOWING that the reduction of excessive temperature and the holding of humidity at correct levels are essential to efficient production and worker health and comfort, Marion Manufacturing Company took action-had an AMCO Evaporative Cooling System installed - and got accountable results. The three charts from separate plant departments provide a graphic record of the ideal conditions maintained by the AMCO system.

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- Reduces excessive temperature and holds relative humidity at point best suited to fibre and process.
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- · Gradually increases regain for good roving and consequent better spinning.
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- High flexibility to meet changing room conditions.
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of lack of judgement or physical factors or bad living habits. These must be eliminated.

(10) Accident prevention is definitely an every-minute part of production, and as such is the natural responsibility of each supervisory person.

(11) The time to investigate any accident is as soon as possible after it occurs, before recollections have a chance

to change.

(12) While efficient production is the end of any industrial organization, safety in production *must* be its policy, if operations are to continue successfully over long periods of time.

(13) The pronouncement of policy in safety is a function of top management, and final responsibility for each and every injury rests upon the same.

(14) Supervisors are entitled to systematic and accurate records and analyses of the same from the staff organization as an aid to production and accident prevention, enabling them to spot bad conditions or bad work habits with minimum time and effort on their part.

(15) The most efficient way to conduct any operation is invariably the safest way. Therefore study of processes or operations by the staff is necessary, in conjunction with the supervisor, so as to further efficient and safe production.

Having arrived at these conclusions, we set out to design a system in accord therewith. The results speak for themselves. By reference to the top line upon the chart, you will see that the costs by years after the system was put into effect, were as follows: 1943-44, \$2.94 per thousand man-hours; 1944-45, \$2.51; 1945-46, to date, \$2.30. Now by reference to the lower line upon the chart, you will see the effect upon *injuries*, because we have eliminated the factor of wage rise year by year, by referring all injuries paid for back to the 1938 wage scale.

1938-39-1.67 cost per thousand man-hours.

1939-40-1.56 relative cost-a decrease of 6.5 per cent.

1940-41-3.11 relative cost-a rise of 86.2 per cent.

1941-42-3.75 relative cost-a rise of 124.5 per cent.

1942-43—3.04 relative cost—a decrease of 19 per cent from 1941-42.

1943-44—1.45 relative cost—a decrease of 61.3 per cent from 1941-42.

1944-45-1.35 relative cost-a decrease of 64 per cent from 1941-

1945-46— .95 relative cost—a decrease of 74.7 per cent from 1941-42, and a decrease from 1938-39 levels of 43.1 per cent.

Our average weekly wage has gone up from 1938-39 175 per cent in eight years, while costs of accidents as measured by compensation paid, including disfigurement awards, which are practically an addition since 1941, have risen only 37.7 per cent, or one-fifth as much.

After thorough study of the entire accident prevention field as far as we were able to cover it, and after drawing the conclusions stated above, we drew two additional ones which are cardinal points with us: (a) Accident frequencies are entirely too high in the textile industry, considering the inherent hazards present; (b) In the well-managed plant,

the frequency of medical or lost-time injuries should be so small as to furnish insufficient data upon which to base records for scientifically engineered analysis and progress in accident prevention.

The preceding paragraphs of this paper have dealt as shortly as your speaker could without slighting important matters, with the overall results of organized accident prevention in our corporation, from a workman's compensation standpoint, and with the overall considerations that guided us in our attempt to engineer safety in the every day production schedule. Now we are going to talk about the form, the content, the technique of use, and some of the by-products of the system as finally evolved. As we progress, I shall also attempt to give you some of the most important reasons why we do things in certain specified ways.

#### NOTICE OF INJURY OR TREATMENT

| SUPERVISOR:                    |            | DATE:                       |
|--------------------------------|------------|-----------------------------|
| INJURED:                       |            | TREATMENT NO.<br>DATE GIVEN |
| And One Di                     |            | TIME GIVEN                  |
| PLACE INJURED:                 |            | DATE INJURED                |
|                                |            | DATE TO RETURN              |
| TYPE INJURY:                   |            | TIME                        |
| PART OF BODY:                  |            | ****                        |
| AGENT OR MACHINE               |            |                             |
| TTPE AND CAUSE<br>OF ACCIDENT: |            |                             |
|                                |            |                             |
| TREATMENT. INSTRUCTIONS        |            |                             |
|                                |            |                             |
|                                |            |                             |
|                                |            |                             |
|                                |            | FIRST AID                   |
|                                |            |                             |
| · su                           | PERVISOR'S | POLLOW-UP                   |
| PLACE INJURED:                 |            | DATE INJURED                |
| TIPE INJURY:                   |            | Time theorem                |

Top part of form above is used by Brandon Corp. for notice of injury or treatment. Supervisor's follow-up (below), is on reverse side of injury or treatment notice.

The first form is entitled "Notice of Injury or Treatment." It is addressed to the supervisor of the injured party, and originates in the first aid department of the plant. It contains the injured party's statement of where the accident took place, the type of injury, the part of the body injured, the agent or machine and part involved as a cause, if any, the treatment given and any recommendations the first aider has to contribute from his experience with similar cases. Additionally, it contains the date and time of treatment, the date and time of injury stated by the injured

| NAME OF<br>PERSON TREATED | DATE<br>AND<br>TIME | DATE<br>AND<br>TIME<br>TREATER | N PLANT | DEPARTMENT<br>AND<br>PLACE | MEDICAL<br>DET TOE | TTPE<br>OF<br>INJURT | PART OF<br>SORT<br>APPECTED | AGENT OR<br>MACRIME<br>AND PART | TYPE AND CAUSE<br>OF<br>ACCIDENT | TREATMENT AND INSTRUCTIONS FOR FURTHER OR SPECIAL 64RE | DATE<br>TO<br>RETURN | FIRST<br>AID<br>ATTENDA |
|---------------------------|---------------------|--------------------------------|---------|----------------------------|--------------------|----------------------|-----------------------------|---------------------------------|----------------------------------|--|----------------------|-------------------------|
|                           |                     |                                |         |                            |                    |                      |                             |                                 | 4                                |  | -                    |                         |

PART OF BODE:

AGENT OR HACBINE AND PART:

INSTRUCTIONS AND OTHER ACTION TAKEN:

TYPE AND CAUSE OF ACCIDENT:

The Brandon Corp. form for recording first aid information, for use by employees only.

# THE ONE-TWO-Three PICKER

# HARD AT THE

The spindle hole of the Dayton Reversible Drop Box Picker is surrounded by extremely hard composition bearing material. It requires no lubrication—won't wear egg-shaped.

### SOFT AROUND PICKER STICK

This section around the picker stick hole is a considerably softer composition. Being soft, it cushions the impact of the picker stick and thereby reduces wear on the picker and on the picker stick itself.

# STILL SOFTER AT

The shuttle contact area is made of a still softer composition to avoid shuttle point loosening and to help assure a perfect throw throughout the picker's life.

• A reversible drop box picker can be no better than any one of its functional parts. Only in the Dayton Picker do you find all three parts made to the specifications above. It's easy to see why we are anxious for you to give Dayton Drop Box Pickers a trial on your looms. Why not write for full information right now?

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# Dayton Rubber THE MARK OF TECHNICAL EXCELLENCE IN NATURAL AND SYNTHETIC RUBBER

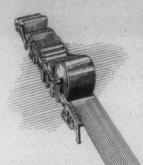
party, and the date and time for retreatment, if any. This report should be transmitted to the supervisor involved by someone other than the injured party, and promptly. This report is a copy of the data shown on the large form entitled "First Aid Record." It should be made and transmitted for all injuries treated, whether connected with work or received entirely outside the course of work. It is primary protection against the type of claim that originates outside the plant, and later, when infection sets in, or arthritis, or other complications occur, is remembered and claimed as an injury connected with work. Now refer again to the first form. Turn it over, and upon the back you will see the title "Supervisor's Follow-up." This is designed to furnish the supervisor with a reliable means of verifying the story told at the first aid, and with a convenient means of recording the instructions given or action taken to prevent a recurrence of injury from the same cause. Variation in the story told by the injured party to his supervisor and at the first aid almost invariably indicates something abnormal about the case and is a danger signal indicating that report should be made to higher authority immediately so that precautionary measures may be taken. At the same time, use of this form lets the workers know that the supervisor is interested in their safety, and gives the supervisor no alternative but to follow-up each injury. It is customary with us for either the superintendent or his assistant to check all such reports for follow-up and corrective action. This then serves as an ever-present safety engineer and private detective. It furnishes the supervisor with immediate notice of any violation of safety rules, such as late reporting of injuries, and gives him the opportunity to contact his workers just after any injury when they are most receptive to safety instruction. Needless to say, any supervisor who is so foolish as to discourage reporting of injuries to the first aid, will in the long run be shown up by the extra high proportion of late reports, or late reports followed by infections, which you will see upon the next form we will discuss.

Our next form to be discussed is entitled "Accident Analysis and Report." Once each month, all the accidental injuries connected with work, in a department, in the plant, and in the corporation as a whole are placed on a single sheet. They are typed and counted. The number of first aid, of medical, and of lost-time injuries is set down. They are typed as to origin, either personal fault or unsafe condition. Then they are typed as to class of accident and injury produced, such as falls, bad housekeeping, handling materials, and so forth. Infections are listed separately, as are late reports (30 minutes appears to be the generally accepted time for effective antiseptics, and so a time limit of 30 minutes was adopted), and late reports followed by infections.

Here I might remark that what usually occurs is this an injury that would not normally be reported by that party or in that department results in infection, and therefore has to be reported. Additionally the supervisor of department or plant is furnished with a statement of the man-hours worked, the frequency of all accidents, the fre-

#### BRANDON CORPORATION-ACCIDENT ANALYSIS AND REPORT

|        |                                       |        |           |     | Plant |                    |       |        |      |                           |            |         | _De      | parti     | ment        |      | Mon      | th of.              |             |        |            |                | 194                                       |
|--------|---------------------------------------|--------|-----------|-----|-------|--------------------|-------|--------|------|---------------------------|------------|---------|----------|-----------|-------------|------|----------|---------------------|-------------|--------|------------|----------------|---|
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|        | MACHINE INVOLVED<br>AND               | MB     | DE        | RET | AID   | MEDICAL            | LOST  | UNSAFE | ACTS | UNEAFE<br>CONDI-<br>TIONS |            |         |          |           |             | MA   | N HOL    | JRS V               | VORKE       | D      |            |                |   |
|        | CLASS OF ACCIDENT                     | NUMBER | ACCIDENTS | E   |       | ME                 | 75    | No.    | 4    | NOF                       |            | -       |          |           |             | TOT  | AL FI    | REQU                | ENCY        |        |            |                |   |
|        |                                       |        | 4         |     |       |                    |       | 248    |      |                           |            |         |          |           |             | MA.  | IOR F    | REQU                | ENCY        |        |            |                |   |
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| 10     |                                       |        |           |     |       |                    |       |        |      |                           |            |         |          |           |             |      |          |                     |             |        |            |                |   |
| 11     |                                       | 16     |           |     |       | 336                |       |        |      |                           |            |         |          |           |             |      |          |                     |             |        |            |                |   |
| 12     |                                       |        |           |     |       |                    |       |        |      |                           |            |         |          |           | TYPE        | OF I | NJUR     | Y IN                | CURR        | ED     |            |                |   |
| 13     |                                       |        |           |     |       |                    |       |        |      |                           |            |         |          |           |             |      |          |                     |             |        |            |                |   |
| 14     |                                       |        |           |     |       |                    |       |        |      |                           |            |         |          |           |             |      |          |                     |             |        | - 00       | 6 7            | ST S                                      |
|        | TOTALS                                |        |           |     |       |                    |       |        |      |                           | cors       | BRUISES | BLISTERS | ABRASIONS | SPLINTER    | EYE  | STRAINS  | SPRAINS             | BROKEN      | BURNS  | INFECTIONS | ATE REPORT     | REPOR<br>WED<br>CTION                     |
|        | TYPE AND CLASS OF ACCIDENT            |        |           |     |       |                    |       |        |      |                           | 5          | BRI     | BLE      | ABRU      | SPL.<br>WO  | ENJ. | Era      | 8P3                 | BR          | BI     | INPE       | (Over 30 Min.) | LATE REPORTS<br>FOLLOWED BY<br>INFECTIONS |
| 1      | Falls (N.O.C.)                        |        |           |     |       |                    |       |        |      |                           |            |         |          |           |             |      |          |                     |             |        |            |                |   |
| 2      | Bad Housekeeping                      |        |           |     |       |                    |       | 1      |      |                           |            |         |          |           |             |      |          |                     |             |        |            |                |   |
| 3      | Handling Material (N.O.C.)            |        | -         |     |       | 100                |       | -      |      |                           |            |         |          | 100       |             |      |          |                     |             | 20.    |            |                |   |
| 4      | Striking Against Objects              |        |           |     |       |                    |       |        | 763  |                           |            | 3000    | 800      |           |             |      |          |                     |             |        |            |                |   |
| 5      | Struck By Objects                     |        |           |     |       | 2                  |       |        | -    |                           |            | -       |          |           |             |      |          |                     |             |        |            |                |   |
| 6      | Struck By Falling Objects             |        | -         |     |       |                    |       |        | 1 10 |                           |            |         |          |           |             |      |          |                     |             |        |            |                |   |
| 7      | Struck By Flying Objects              |        |           |     |       |                    |       |        | -    |                           |            |         |          |           |             |      |          |                     |             |        |            | -              |   |
| 8      | Caught By or Between Objects          |        | -         |     |       |                    |       |        |      |                           |            |         | -        |           |             |      |          |                     |             |        |            |                |   |
| 9      | Pocket Knives and Scissors            |        |           | -   |       |                    |       | -      |      |                           |            |         |          |           |             |      |          |                     |             |        | -          |                |   |
| 10     | Other Hand Tools                      |        |           |     |       | -                  |       |        | 111  |                           |            |         | -        |           |             |      |          |                     |             |        | -          |                |   |
| 11     | Hand Trucks and Boxes                 |        | -         |     | -     |                    |       |        |      |                           |            |         |          |           |             |      |          |                     |             |        |            |                |   |
| 12     | Infections                            | -      |           |     |       |                    | -     |        |      |                           |            |         | -        |           |             |      |          |                     | 1 1 1 1 1 1 |        |            |                |   |
| 18     | Fires, Steam, Etc. Harmful Substances |        |           |     |       |                    |       | 011    |      |                           |            | 3.7     |          | 1172      |             |      |          |                     |             |        |            |                |   |
| 14     | Defective or Unguarded                |        |           |     |       | 15 12 3            |       |        |      |                           |            | -       |          |           |             |      |          |                     |             |        |            |                | 7 77 77 77 77 77 77 77 77 77 77 77 77 7   |
| 15     | Cleaning, Oiling, Repairing           |        | 100       |     | 100   | 7.7                | 700.  |        |      |                           |            | 37.00   |          |           | DESCRIPTION |      | 1        |                     |             |        | -          |                |   |
|        | Machine Operation                     |        |           |     |       | No. of Concession, | 30.00 | 1275   | 1    | The bally pub             | L. Carrier |         | 1        | 10,010    | No.         |      | 1501/150 |                     |             | 19/19/ | 1-67.00    |                | Market 1                                  |
| encome |                                       |        |           |     |       |                    |       |        |      |                           |            |         |          |           |             | 14   |          |                     |             |        |            |                |   |
| 17     | Miscellaneous                         |        | 7         |     |       |                    |       |        |      |                           |            |         |          |           |             |      |          |                     |             |        |            |                |   |



• While visiting a plantation, Eli Whitney saw the difficulty that seed separation presented to the cotton grower and began working on the problem. It is said that Whitney got his idea for the Gin when he saw a cat try to pull a chicken through the bars of the coop but only get his claws full of feathers. From this simple beginning came the machine that started the industrial revolution.

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quency of accidents going beyond the first aid stage, which we term major accidents, and the frequency of lost-time accidents. He also receives a statement of the medical and compensation costs, and of his cost per thousand manhours worked. All of these are furnished for the current month, and also for the year to date. Attached to this is a transcript of the first aid record for his department in the case of all departmental supervisors. At the same time, each superintendent receives a copy of the plant report for all plants, and each departmental supervisor receives a copy of the reports for similar departments in other plants. This enables a supervisor to immediately spot causes, persons concerned with the most accidents or the most serious accidents in his department for remedial action. At the same time it enables all supervisors to spot other supervisors who have eliminated causes or types of accidents that are bothering them, and thus get the benefit of their ideas or remedies.



At monthly safety council meetings consisting of supervisory personnel in each plant, we discuss the analytical reports, and exhibit progress charts for corporation, plants and departments. This enables plant and departmental supervisors to visualize their relative standing and progress.

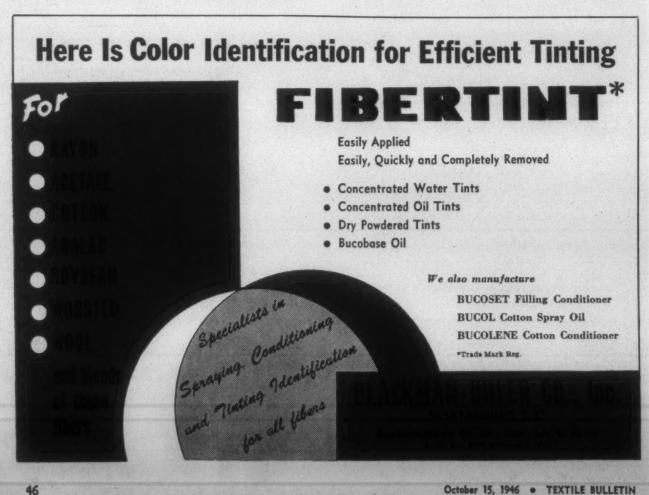
Staff work is confined to study, classification, and analytical factual reporting. In other words, staff assistance does not attempt to fix blame upon anyone, merely to report facts in such a way that production officials are furnished compass, sextant, and chronometer to sail by, instead of going by "guess and by God." Top management receives copies of all reports, and many safety and production betterments have been secured for plant or departmental supervisors as a result of discussion of analytical reports and cost sheets between staff and top management, which would in all likelihood not have been secured without supporting data such as the analytical reports furnish.

In conclusion, let me say that there are many by-products of a system such as ours, which do not appear immediately on the surface. Some of these are better personnel relationships and management, better flow of production, better quality and cost of production, lower worker turnover, and easier supervisory jobs.

#### DISCUSSION

MR. HARDIE: Did you have any trouble from the supervisory personnel in establishing your system?

MR. PHELPS: We had at first; but, because of the fact that you can refer to these analytical sheets and the fact that they go to top management each month, it did not take long to get co-operation. These sheets show up a man's record. I will give you this instance. In one plant we had 18 lost-time accidents in one month, in which 1,458,000 manhours were worked. Eleven of those accidents occurred in one department, which worked only 536,000 man-hours.



When that report came to top management it did not take them long to find out who was responsible. I might add that that supervisor is no longer with us.

#### An Efficient Accident Prevention Program

By J. D. GREEN, Plant Manager Springs Cotton Mills, Kershaw, S. C. and GEORGE D. BAKER, Superintendent, Eureka Plant Springs Cotton Mills, Chester, S. C.

THE Liberty Mutual Insurance Co. recently awarded the Springs Cotton Mills a flag for excellency in accident prevention work. The record of 2.2 lost-time accident frequency, as compared to the South Carolina textile group insured by the Liberty Mutual of 8.0 and compared to the national expectancy lost-time frequency of from ten to 20, was attained by the 10,000 employees of Springs Cotton Mills. The title of this paper might lead you to believe that we consider ourselves nearly perfect. However, we at Springs feel that we are a long way from perfection in safety work. Inasmuch as our program is workable and has earned us this recognition, we will present a sketch of an outline of its use in our Lancaster plant.

A safety group composed of all the supervisory staff, including superintendents, overseers, assistant overseers, and second hands, conducts a safety program meeting the last Wednesday of each month. This group is divided into two teams. These teams are composed of overseers from each department so that they include an equal number of overseers and man-hours of operation from each department in the mill. This prevents one full department from competing with another full department, which would leave room for argument as to the hours operated and the hazards involved. This monthly meeting is presided over by a chairman selected from the alphabetical list of superintendents. The chairman serves three months. The plant employment clerk is the permanent secretary of the safety group and keeps all of the records of the safety meetings.

Prior to the meeting, a plant inspection is conducted by men selected from this safety group at the preceding meeting. No overseer inspects his own department, and he may delegate an assistant to make his inspection for him. The inspectors' findings and recommendations are turned in to the secretary prior to the 20th of the month. The secretary furnishes the superintendent of each department a copy of the inspection report, so that he can handle any findings or recommendations before the safety meeting. These inspection reports are read at the meetings, and the recommendations are studied closely. Certain members at the meeting are designated by the chairman to see that these recommendations are carried out.

All members of each team are furnished a mimeographed copy of the teams' comparative standing and a list of the accidents that have happened during the current month. This team standing report has eight columns, as follows:

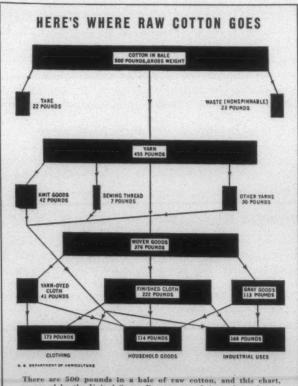
(1) Name of team captain; (2) Department; (3) Total man-hours for the year; (4) Number of accidents for the month; (5) Total accidents for the year; (6) Standing for last month; (7) Standing for the year through the current month; (8) Lost-time frequency.

The reason for showing last month's standings as well as

the present standing is to show whether each team gained or lost during the month. These columns are totaled and given a mill average. The team standing figures are arrived at by multiplying the number of accidents by one million, dividing by the man-hours, and subtracting from 1,000. The standings of these safety teams are kept by the month, and the losing team each month makes a small donation to the safety club treasury. Occasionally the safety club has a barbecue or fish fry with these funds.

The list containing the team captain's name, name of injured employee, type of injury, and percentage of responsibility for the injury is thoroughly discussed at this meeting. Occasionally the injured employee is invited to the meeting to listen to this discussion and answer any questions concerning his or her part that might give light on future prevention of similar accidents. When an accident occurs in the plant, the department head makes out an injury-responsibility report, which is part of the above mentioned discussion. This report gives room to place the responsibility on the injured employee, the supervision, the hazard of the job, or other responsibilities. For instance, an accident could be credited 50 per cent to the injured employee and 50 per cent to the hazard of the job, etc. We feel that this open forum discussion and diagnosis of accident responsibility tends to keep interest in getting better results from the supervisors in handling all matters of safety with the personnel.

Particular stress is placed on the immediate handling of each accident, regardless of how minor it may be. We have found that following up a minor accident has helped us prevent more serious or lost-time accidents. First aid equipment is furnished each department, and trained employees on each shift administer first (Continued on Page 73)



There are 500 pounds in a bale of raw cotton, and this chart, prepared by the United States Department of Agriculture for its recently released booklet, Marketing and Manufacturing Margins for Textiles, shows just how the cotton crop is utilized on the basis of a single bale.

# Dyeing and Finishing

# FABRIC FINISHING

By RICHARD W. POWELL, Research Director, Bradford Dyeing Association

- Before National Association of Cotton Manufacturers -

THE modern trend in the finishing of woven textile I fabrics is directed as never before towards satisfying a rising consumer demand for faster colors and more durable finishes. This is not to say that the requirements of yesterday have gone by the board. In normal times eye appeal and hand are just as important as they ever were, but the woman who buys yard goods or wearing apparel today is not going to be satisfied with these two attributes alone. She also wants to know-will it wash, will it fade in the sun, will the finish wash out, will it shrink, and so forth. This tendency has been accelerated of recent years by various instructions representing consumer groups, by certain progressive mills, finishers and converters, and by descriptive national advertising by chemical firms using trade name processes. The publicity given to various new products and processes has resulted in the education of the consumer to demand colors and finishes which at least will last the life of the garment.

The finishing of woven textile fabrics may be divided for our purpose into three main sections: Bleaching or Preparation—which includes all steps necessary to clean the goods, to remove naturally occuring impurities such as waxes, pectins and leaf from cotton and other natural cellulosic fabrics, and to remove sizing material and oil from both natural and synthetic fabrics; Dyeing; and Finishing—which comprises the treatment of the goods after dyeing, to enhance the characteristics of the fabrics themselves, or to confer new characteristics as for example, luster, softness or crispness, crush resistance, shrinkage control and dimensional stability, water-repellency, mildew resistance and so

#### Continuous Peroxide Bleach

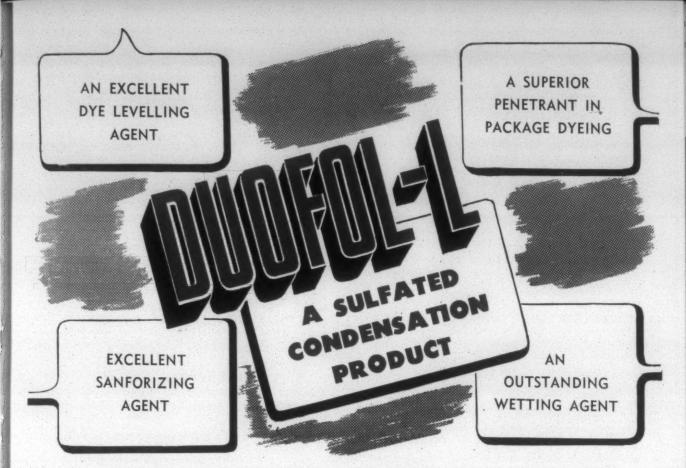
The most significant development in this field is that of the continuous peroxide bleaching process, which was in the pilot plant stage just prior to the war, but is now in operation in an increasing number of finishing plants, and appears likely to supplant completely established procedures which have been current practice for a great many years. The equipment may be designed to handle cloth in either open width or rope form. After the usual singeing and desizing the cloth is rinsed, saturated with caustic soda, passed through squeeze rollers and plaited down into a J-box where it is allowed to steep for one to 1½ hours depending upon the weight and construction of the goods. Prior to entering the J-box the cloth is passed through a steam heater tube or it may be heated in the J-box itself by

means of live steam. This cycle of operations is then repeated with an alkaline peroxide saturation, and the cloth is plaited into a second J-box for one to 11/2 hours, washed and pulled into the whitebin. Operating speeds vary from 100 yards per minute to an excess of 200 yards per minute depending on the type of cloth being processed. Advantages of the process are savings in labor and time compared with the older kier boiling procedures, uniformity of bleach and consequent elimination or curtailment of rehandling costs. There does not seem to be any agreement at the moment among mills operating the process, as to chemical savings. Some mills find their chemical cost to be about the same as that of the older method, while other mills claim a slightly lowered cost. The process may be adapted to the bleaching of cloth containing colored effect threads, such as yarn dyed striped shirting and the like.

#### Pad-Steam and the Williams Unit

Among recent advances in the art or science of dyeing are the Du Pont continuous pad-steam process for the dyeing of vat colors and the use of the Williams unit for the same purpose. The two processes are contributing greatly to the fulfillment of the modern trend for colors which are good for the life of the garment. Prior to the development of these processes, the use of which was given impetus by the war stimulated demand for hundreds of millions of yards of vat dyed cotton goods for the use of the armed forces, the most satisfactory method of applying vat colors to piece goods from an appearance and fastness standpoint was the so-called pad-jig method. In this process, a suspension of the vat pigment is applied to the cloth by means of a padder, and the cloth is batched onto rolls of 500 to 1,000 yards. The individual rolls are then transferred to jigs where reduction of the dyestuff to the soluble leuco state takes place and the dyed cloth is washed, oxidized, and soaped to its final shade. Such an operation is very time-consuming and a single roll of cloth may require three to four hours to process.

In the Du Pont method, which bears some similarity to established procedures for the printing of vat colors, the cloth is padded through a suspension of the vat pigment as in the pad-jig method. After padding the cloth may be dried or not, depending on its type. It then passes through a chemical padder containing a solution of caustic soda and sodium hydrosulphite at a temperature of 90° F. and into a steamer, where it is steamed for ten to 30 seconds with moist air free steam at a temperature of 212-214° F. Wash-



Hartex Duofol L, a sulfated condensation product, is a clear amber oil possessing superior wetting, rewetting, and softening properties. It is clearly miscible with water in all proportions and retains its high surface activity in the presence of hard water, salt, alkali, or weak acids.

Duofol L was developed for instantaneous wetting in baths at all temperatures up to the boil.

It is recommended for dyeing operations in general and specifically for vat and package dyeing to give greater uniformity of shade.

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pased on research

ing, oxidation and soaping of the dyed goods may follow in compartments in line with the pad steaming equipment or the cloth may be transferred to a continuous soaping range for this purpose. Ranges can be designed to include the complete operation of padding, drying impregnating steaming, oxidizing, soaping and drying. Operating speeds run from 80 to 150 yards per minute, depending on the type of cloth being handled and the equipment available. Savings in labor and in chemical costs are appreciable and properly controlled equipment will produce results of equal fastness and appearance to the pad-jig method.

Use of the Williams unit for vat dyeing is an outgrowth of an older continuous method of vat dyeing which was developed in the late 1920s. In this method the cloth was first padded with a leuco solution of the vat color, passed into one or more so-called booster boxes or tanks with a capacity of several hundred gallons and containing a solution of caustic soda and hydrosulphite and finally into additional boxes for oxidation and soaping. The older process had several drawbacks. In the first place, the fastness and appearance of the dyed result was not as good as pad-jig dyed goods, and the uniformity of the shade was exceedingly difficult to control. Secondly, the large initial requirements for chemicals used in the booster boxes limited the use of the process to yardages of not less than 20,000 yards per shade. Some improvement was made in this older method of continuous dyeing by padding the cloth through a dispersion of the pigment as in pad-jig dyeing, drying the goods and then padding the dried cloth through the usual reduction solution and allowing it to pass into the boosters in the manner already described. This modification resulted in a better dyed appearance and better fastness, but the mechanics of the process were such that yardages per shade were still required in order to make the operation economical. Mainly on account of this factor the use of these continuous processes were limited largely to those plants finishing large yardages of work clothing, low-end shirtings and the like.

The Williams units replace the larger booster boxes in the recently improved method of continuous vat dyeing, and as the volume of liquor which they use is less than onetenth that of the booster due to their special construction, much smaller yardages can be run economically with this type of equipment. The units occupy little space, each unit being approximately four inches long and five inches deep. The capacity of the unit is 12 yards and the volume 60 gallons. Each unit contains four wells, each well having half-inch spacing on each side of a removable baffle. The material passes through this narrow channel and due to the confinement of the area of travel a pressure is developed at high speeds along with a fast moving circulatory action of the treating solution. The movement of material with the solution accounts for the speed of reduction obtained with vat colors.

Cloth is padded through a vat color dispersion, dried or not as the case requires, and passed through one or more Williams units where reduction and dyeing take place. The pieces are then washed, oxidized and soaped as usual. The method has similar advantages to those of the Du Pont steam including chemical and labor savings. There still remain certain problems to be solved, however, in connection with the use of this equipment. For example, chlorine fast bright blues are difficult to produce and heavy shades present certain problems in securing the proper fastness.

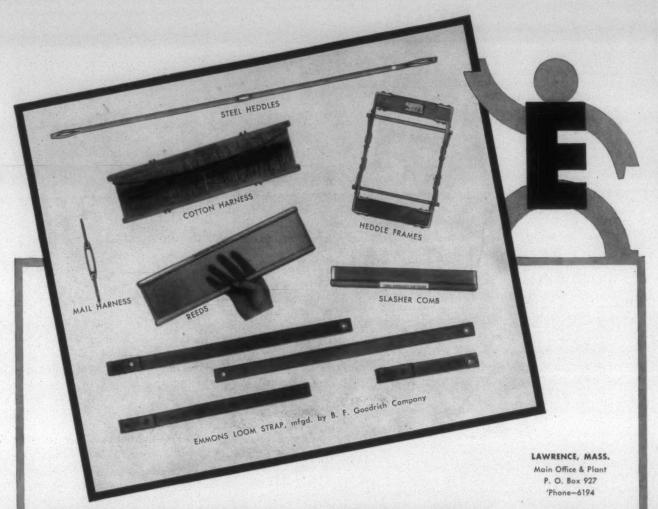
#### **Pigment Dyeing**

No description of modern fast color dyeing methods could be considered complete without some mention of pigment dyeing. The basic method of coloring textile piece goods by means of pigments banded to the fiber is probably among the earliest methods of coloration known. Until the last few years the process was little used except for the cheapest class of work, where a certain amount of pigments was used in printing, together with albumin, starch, or casein as a binder.

Increasing knowledge of the properties of synthetic resins and development of new pigments with outstanding resistance to light has resulted in a rebirth of interest in the process. As a result of intensified research and development on the part of chemical manufacturers and finishing plants, the process is now finding its place among other methods of producing fast colors on textiles. The method is quite simple in its essentials, but there are many difficulties which have to be ironed out in practice. There are several possible methods of producing the color formulations used, but in the two most widely used methods selected blends of synthetic resins of both the thermosetting and thermoplastic types chosen for their excellent wash fastness on textiles are dissolved in a suitable organic solvent and emulsified to produce either an outside oil phase emulsion or an outside water phase emulsion. Extremely fine dispersions of pigments are mixed with the resin emulsion and the color mix applied to cloth by means of a two or threeroll padder. The cloth is dried under controlled conditions and cured at elevated temperatures to polymerize the resin binders and produce a wash fast result. The advantages of the process are simplicity of application, and continuous operation with excellent uniformity of shades. Color costs show some saving over vat colors in the majority of instances. Pigment dyeings are currently being applied to a wide variety of cotton cloths, but the volume does not approach that of vat dyeings. The most serious drawback of the method is the moderate crock fastness which limits the use of the method to light and light-medium shades. Lightfastness with properly selected pigments is at least the equivalent of vat dyes and wash fastness is fair. There is some tendency for removal of pigment on extended laundering and some cloths exhibit whitish marks due to local removal of pigment by mechanical action. For specialized applications the pigment colors are very well adapted. For example, when applied to cellulose acetate flat goods such as satins and taffetas they produce results which have excellent resistance to gas fume fading as well as light fastness, which renders them ideally suited for application to cloths used for bedspreads, blanket bindings, shower curtains, draperies and the like. They also produce excellent results in light and medium shades on some of the newer fibers, such as nylon, Fortisan, Fiber A, vinyon and glass, where conventional dyestuffs either cannot be used or entail some sacrifice of fastness and appearance.

The modern durable finishes may be roughly sub-divided into three classifications: (1) Those reacted on the surface of the fiber; (2) those reacted largely within the fiber; and (3) materials which react directly with the fiber itself. There is some overlapping of these classes and they are outlined in this manner merely to simplify a discussion of their various characteristics.

An outstanding example of the first class, which represents by far the greatest number of variety of finishing ma-



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#### EXPORT AGENTS

ARGENTINA: Storer & Cia., Chacabuco 443-49, Buenos Aires.

BRAZIL: A. Polak, 216 Av. Beira Mar, Salas 403 a-d, Edificio Magnus, Rio de Janeiro and Rua Florencio, Abreu 157, Edificio Sao Bento, Salas 510 A.C., Sao Paulo.

CHILE: W. L. Robinson, Casilla 4075, Santiago. COLOMBIA: C. E. Halaby & Co., Apartado 139, Medellin.

CUBA: J. M. Perez Pena, Apartado 1611, Habana.

MEXICO: Leo Lenk, Ave. Republica Guatemala 4, Mexico, D.F.

PERU: Constantino N. Sabal, Casilla 2288, Lima. VENEZUELA: N. Marvez, Apartado 391, Caracas.

URUGUAY: Storer & Cia, Paysandu 1202, Montevideo.

#### CHARLOTTE

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Arthur Harris P. O. Box 1982 'Phone-Main 2643

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EMMONS WEAVE ROOM EQUIPMENT

terials, is the durable water repellent finish typified by Zelan and Norane. These products were used in great volume during the war to produce water-repellent finishes on cotton poplins, oxfords and sateens for use by the armed forces. The Quartermaster Corps contributed in large measure to a knowledge of their properties, their correct method of application and their durability under field conditions. In combination with the Shirley type cloth they produced the most satisfactory water repellent garment used during the war. The products are applied in water emulsion form on a padder, usually dried on a tenter frame at controlled temperatures and subjected to much higher temperatures for a short time during which curing is effected. The treated cloth is then neutralized to remove residual acid generated in the curing operation, and dried. Satisfactory water repellency of properly treated cloth is retained through several launderings and dry cleanings, but it is essential that all traces of soaps and oils be thoroughly rinsed out after cleaning or laundering.

An interesting possibility for the future production of durable water repellent finishes involves the use of certain organo silicon helides, known as silicones. These chemicals have been used largely for the treatment of ceramic insulating materials where they have been applied in the form of a vapor. Vapor treatment of textiles is something new in the industry and there are a good many application bugs to be ironed out before the process becomes commercially feasible.



There is an almost infinite variety of synthetic resins and other materials such as cellulose derivatives which can be used for this purpose. In addition many of these products confer other valuable properties upon textile fabrics, such as a reduced tendancy to shrink, improvement in tensile strength and better resistance to wear. The alkali soluble cellulose ethers and the alkali solutions of cellulose can be used to produce a wide range of finishes from full soft finishes to crisp organdie type finishes. They are usually applied to fabrics from caustic soda solutions by padding and the cellulose is insolubilized by passing through a bath of either sulphuric or acetic acid, by plain boiling water or by drying. Pigments may be incorporated with them to produce colored effects for certain purposes, although the color does not have a high degree of wash fastness and in addition crocks badly. It is claimed that these cellulosic materials improve tensile strength and abrasion resistance and that the treated cloths have a reduced tendency to shrink. For these reasons they have been used quite extensively on sheeting and low-end shirtings and for the production of imitation organdie finishes. They have also been applied to certain delicate fabrics on the gray, to prevent yarn slippage and distortion in subsequent processing. This group of finishing materials is relatively inexpensive but its use requires a special machine set up in a finishing plant.

Partially polymerized thermosetting type resins such as urea formaldehyde and more recently melamine are also

widely used to build up the hand and produce crisp linenlike finishes, particularly on spun rayon fabrics. They are usually applied from water solution by padding, drying and curing at high temperature to complete the polymerization of the resin and render the finish wash fast. Their use on cotton fabrics has been limited due to their so-called chlorine retention properties, which means that cloth treated with these resins tends to pick up chlorine during commercial laundering. During pressing or ironing the retained chlorine is converted to acid resulting in tendering of the goods. This condition is not nearly as marked with melamine resins as with ureas. But it does exist in both cases. A notable example of the use of this type of resin is in the well known durable glazed chintz finish, and these resins also form the basis of many of the so-called slipproof finishes on the market today.

The use in textile finishing of thermoplastic synthetic resins is of comparatively recent origin. They are invariably applied from aqueous emulsions or dispersions of the polymerized resin. Due to the fact that they are already fully polymerized, they are applied merely by padding on to the cloth and drying. No curing is required. The first group of resins of this type used commercially on textiles were the acrylics and their derivatives. They produce a wide range of finishes varying from soft and elastic to hard and crisp. As the resins are colorless and transparent (you will recall that this was the type used extensively during the war under the trade names Plexiglas and Lucite for the production of bomber noses and cockpit enclosures) they enhance the appearance of the finished cloth. One member of this group may be used for the production of durable delustered finishes on rayon.

Other thermoplastic resins which have come on to the market within the last year or two in a form suitable for textile application are the vinyl resins and their derivatives and the styrene resins. In the earliest stage of textile development are the polythenes, some of which have been found in England to produce very soft, full wash resistant finishes. The use of the vinyls and styrenes has not been fully explored as yet, but they show excellent possibilities in the production of specialized types of finishes. For example, since polyvinyl chloride is extremely fire resistant it may be used in the production of durable flameproof finishes when applied in conjunction with antimony oxide. By combining certain members of each type of resin with high-melting-point waxes, water repellent fabrics may be produced, since some of these resins have remarkable resistance to water. The sodium salt of one of the styrene derivatives has pronounced anti-static qualities and may find a use in the production of anti-static finishes of synthetics, such as nylon, which tends to build up strong charges of static electricity. Examples cited are not necessarily out of the development stage, but will serve to indicate some of the possibilities inherent in the use of the thermoplastic types.

The crease resistant finish is the outstanding example of the use of synthetic resins reacted within the fiber itself. Resins used are almost exclusively of the urea formaldehyde or melamine formaldehyde type and they are applied to the cloth from water solutions along with acid forming catalysts. In order to obtain penetration into the core of the fiber it is necessary that the size of the resin molicule shell be extremely small and for that reason the resins are applied in as close to monomeric (Continued on Page 82)



## LAWRENCE CALFSKINS

the name leading mills choose

Pepperell Manufacturing Company, like many other top-ranking cotton mills, uses Lawrence Calfskins for spinning-frame aprons, to assure the finest in spinning results. More mills insist on Lawrence Calfskins than any other brand. Experience has taught them, first, that perfect drafting comes from the natural surface of calfskin... second, that Lawrence experience in product

research, manufacture and detailed inspection results in uniform high quality.

Lawrence Calfskins for your aprons assure you the excellent performance and longerlasting resilience that have always characterized the Lawrence brand. A. C. Lawrence

> Leather Company, Peabody, Mass., manufacturers of Lawrence Spinna Calf for roll coverings. Represented by H. H. Hersey, Greenville, S. C.

VERY YEAR MORE PEOPLE DECIDE LEATHER IS BEST

# textile bulletin

Published Semi-Monthly by

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P. O. Box 1225 — CHARLOTTE 1, N. C. — Telephone 3-3173 Offices and Plant: 218 West Morehead Street

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| One year payable in advance     |  |  |   | \$1.50 |
|---------------------------------|--|--|---|--------|
| Other countries in Postal Union |  |  |   | 3.00   |
| Single copies                   |  |  | - | .10    |

Textile Bulletin is a member of the Audit Bureau of Circulations and the Associated Business Papers, Inc.

#### Time for a Change

With only a few weeks remaining before the election of members of Congress, there is a growing conviction that the Republicans will control the next House if not the next Senate.

The Richmond (Va.) News Leader sums up the situation very well with the following editorial comment:

There come times when millions of voters decide to vote against one party rather than for another. That spirit is in the air now. Few persons will change parties this year because they approve the G. O. P. leaders or the scattered proposals—they do not constitute an integrated policy—advocated by Mr. Taft and other talkative gentlemen. Independents by the tens of thousands are switching to the Republican ticket this year because they want to express in this manner the accumulated resentments built up against the Democrats.

As nearly as this newspaper can ascertain, the reasons most persuasive with voters of this mind are these five:

1. They believe the Democrats have "been in office long enough."

2. "A change will do the country good."

3. Democrats have been wasteful and extravagant.

4. The administration is in the hands of incompetents.

5. It is time to end this talk of "an emergency" that has been a general warrant for doing what the Constitution does not permit or the condition of the country require.

We might add that the average voter is now convinced that it is unsafe to leave power in the hands of an incompetent weakling like Truman and that a Republican House of Representatives would be a wise curb upon his uncertain activities.

### According to Color

C. I. O. elections continue to run according to color, that is, Negroes for and whites against.

At the leaf tobacco plant of the J. P. Taylor Co., Goldsboro, N. C., where most of the employees were Negroes, the vote was—

| For the | C. I. O  |  |  |  |  |  |  |  | 443 |
|---------|----------|--|--|--|--|--|--|--|-----|
|         | A. F. of |  |  |  |  |  |  |  |     |
|         | company  |  |  |  |  |  |  |  |     |

At Interstate Tobacco Co., Lumberton, N. C., with Negro employees predominating, the vote was—

| For the | C. I. O | 129 |
|---------|---------|-----|
| For the | company | 48  |

At the Whitehead-Anderson Tobacco Co., also of Lumberton, the vote was—

| For | the | C.  | 1. | 0.  |  |  |  |  |  | * |     |  | 173 |   |
|-----|-----|-----|----|-----|--|--|--|--|--|---|-----|--|-----|---|
| For | the | con | np | anv |  |  |  |  |  | 2 | 100 |  | C   | , |

Contrast the vote in those plants where Negroes predominate with that of the following plants where most of the employees are whites.

At the Randleman Mills, Randleman, N. C., the vote was—

|  | For | the | C. I. | O |  |  |  |  |  |  |  | 38 |  |
|--|-----|-----|-------|---|--|--|--|--|--|--|--|----|--|
|  |     |     | comi  |   |  |  |  |  |  |  |  |    |  |

At the Southern Webbing Co., Greensboro, N. C., the

| For the | C. I. O  | <br> | <br> | 16 |
|---------|----------|------|------|----|
| For the | company. | <br> | <br> | 28 |

At the Eastman Cotton Mills, Eastman, Ga., the vote was—

At the Dothan Hosiery Mills, Dothan, Ala., the vote was—

At an A. F. of L. election held at the Morgan Cotton Mills, Quitman, Ga., after some one had distributed among the employees a picture of Catherine Lewis, daughter of John L. Lewis of the A. F. of L. (formerly of the C. I. O.), seated at a Negro banquet between two Negro men, the vote was seven to one against the union—

By telling the Negroes that the C. I. O. will help them attain social equality with white people through the enactment of the Federal F. E. P. C. law, the C. I. O. has carried elections in tobacco plants, but because the white cotton mill employees have discovered that the C. I. O. favors forcing white girls to work side by side with Negro girls and use the same rest rooms and restaurants, the C. I. O. is losing almost every election held in a textile plant.

The results of the above elections and numerous other elections, the statistics of which were given in our last issue, should convince any fair-minded person that as far as the South is concerned the C. I. O. is rapidly becoming a Negro union.

They win all elections where Negroes predominate but are steadily losing elections at mills where the employees are white.

There are, of course, some mill employees who do not place themselves or their wives and daughters above Negroes and are perfectly willing to vote for an organization which stands 100 per cent for social equality between Negroes and whites.

There are some local men who, because they get part of the initiation fees and dues which are to be paid by mill employees, are willing to help bring about the day when white girls will be forced to work under Negro overseers and Negro second hands and share rest rooms and restau-

rants with Negro girls.

In those terrible days of the reconstruction period, just after the Civil War, when the carpetbaggers where trying to force social equality upon the South, and no white woman was safe from attacks by Negroes, there were some Southern men who, for pay, turned against their sections and their people and assisted the carpetbaggers.

Those men earned the scorn and contempt of Southern people and their children and grandchildren were pointed out for many years after the carpetbaggers had been driven

out and white supremacy restored.

Any man who works for the C. I. O. is working for an organization which openly admits, in fact, boasts to Negroes in tobacco plants that it seeks to place Negroes upon the basis of social equality with whites.

#### John L. Dabbs

Although John L. Dabbs had, because of illness, been in retirement for a number of years, news of his death brought a feeling of sadness to a host of admirers throughout the colored goods section of the textile industry of the South.

Beginning as a worker in a dyehouse at Rock Hill, S. C., John Dabbs became the dean of the dyestuff men of the South and acquired universal esteem. His last position was as Southern representative for E. I. du Pont de Nemours & Co. with headquarters at Charlotte.

Because of his ability, high character and friendliness, John Dabbs won an enviable position, and those who knew him will never forget him.

### **Good Pickings**

American Federation of Labor President William Green told the United Mine Workers of America, the John L. Lewis organization, at their recent meeting in Atlantic City, "I was never more happy before in my life."

The union treasurer had just told the delegates that they had \$13,500,000 in the treasury, plus a \$2,250,000 health and welfare fund deposit in a New York bank.

Almost any big corporation would be happy if it had a surplus fund of \$15,750,000 and had the assurance that more was coming every week.

Every man or woman who buys a ton of coal pays an extra \$1.50 because John L. Lewis took the country by the throat and it became a question of life or death with the people of the United States. While our young men were fighting in Europe or in the Pacific, John L. Lewis called out the mine workers and stopped the production of the coal which was absolutely necessary for the manufacturers of war munitions and other supplies.

John L. Lewis and his mine workers were perfectly willing to allow our fighting men to find themselves without fighting materials and supplies and for them and us to lose the war. The people of America could not allow that to happen and yielded to the John L. Lewis demands.

Viewing the piled up surplus of \$13,500,000 and knowing how much more is to come, William Green is happy, but to our mind, John L. Lewis should have occupied a seat alongside Herman Goering at Nuernberg and been given an opportunity to defend himself from the charge that he was willing to allow Germany to win the war.

### Southern Textile Association Divisions Announce Scheduled Programs

MEETINGS during the early part of next month have been scheduled by the Eastern Carolina and Northern North Carolina-Virginia divisions of the Southern Textile Association. The Eastern Carolina Division will have its fall meeting at 9:45 a. m. in the Erwin Mills Auditorium, Durham, N. C., and the Northern North Carolina-Virginia Division will gather at 9:45 in Hylton Hall, Schoolfield, Va.

At Durham, discussion will be devoted to four general topics—carding, spinning, slashing and weaving. Under carding are (1) Card Stripping: (a) what system of stripping do you use and what are its advantages?; (b) if you use vacuum stripping, can it be used for removing fly, motes, etc.?; and (c) how often do you strip cards, and what is the grade and staple of cotton being run? (2) Nep Control: (a) what system of detection, prevention and elimination of neps do you use?; (b) do you use special nep count apparatus or do you have other means of determining the number of neps in stock from pickers and cards? (3) Sliver Preparation: (a) do you like the sliver lap preparation for drawing and if so, why?; (b) do you think there are other methods better than sliver lap and if so, why?

Spindle developments will be dealt with during the spinning discussion: what type spindle do you use and what are the advantages and disadvantages of this type compared with others?; do you get a saving in power, oil and maintenance costs?

There will be two slashing questions: (1) What system of feeding size do you use, circulating or gravity? Give advantages of your system. (2) Does the size solution thin down after running some time? If so, how do you control this?

Inspection systems will be discussed relative to weaving: (a) what do you inspect and how often?; (b) how often are harness timing and setting checked and what variation do you allow?; (c) what variation do you allow from standard in pick motions?; (d) what methods have you adopted for eliminating thin places and broken picks?

Three addresses will be featured during the meeting at Schoolfield. Thomas Carroll of Winston-Salem, N. C., personnel director for Wachovia Bank & Trust Co., will speak on personnel work and human relations. W. S. Murphy of Greensboro, N. C., district manager for American Monorail Co., will discuss automatic cleaning for spinning, winding, spooling, twisting and warping. Materials handling will be covered by V. G. Brookshire of Engineering Sales Co., Charlotte.

A new chairman, vice-chairman and secretary, in addition to three divisional executive committeemen, will be nominated and elected during the meeting.

# ONSTRUCTION. NEW EQUIPMENT. FINANCIAL REPORTS. CHARTERS. AWARDS. VILLAGE ACTIVITY. SALES AND PURCHASE

GRANITE FALLS, N. C.—Work has begun on warehouses for Granite Cordage Co. and Granite Falls Mfg. Co. following approval by the Civilian Production Administration. The \$75,000 contract has been awarded to V. P. Loftis, Charlotte contractor.

PINEVILLE, N. C.—What formerly was known as Mill No. 5 of Chadwick-Hoskins Co., containing 14,268 spindles and 316 looms, has been sold by Textron Southern, Inc., to Proximity Mfg. Co. of Greensboro, N. C. Legal papers recording this change of ownership bore tax stamps which indicated a consideration of \$119,000, not necessarily a reliable statement of the exact sale price.

WINSTON-SALEM, N. C.—P. H. Hanes Knitting Co. is completing the installation of a new line of opening and cleaning machinery. A particularly interesting feature of the new machinery is the use of colored lights to indicate whether feed hoppers are full of cotton or whether more cotton is needed.

BLUEFIELD, W. VA.—White Sulphur Industries, a subsidiary of Burlington Mills Corp. with headquarters at White Sulphur Springs, W. Va., has leased a plant in Bluefield which will be equipped for the manufacture of ribbons. Bluefield operations will be similar to those already under way at White Sulphur Springs. The Bluefield plant formerly was utilized by Esmond-Virginia Co. for the production of blankets.

KINGS MOUNTAIN, N. C.—The Cora Plant of Textiles, Inc., containing 18,808 spindles for production of carded yarn, has been purchased by Scranton (Pa.) Lace Co. Textiles, Inc., thus has removed itself from the carded yarn trade, and in the future will concentrate on combed numbers only. Z. F. Cranford will continue as superintendent of the plant.

LAFAYETTE, GA.—A majority of stock in Lafayette Cotton Mills has been sold to New York buyers, and the sale has transferred control of the mill to Lawrence Fabrics Corp., New York City. The present management of the mill will be continued. Officers of the new corporation are Max Herman, president; W. A. Enloe, vice-president; W. E. McKown, executive vice-president; Lloyd S. Hoffstatter, treasurer; W. A. Enloe, Jr., assistant treasurer, and Walter B. Shaw, secretary.

Anderson, S. C.—Merger of Gossett Mills of Anderson and its subsidiary, Chadwick-Hoskins Co. of Charlotte, into Textron Southern, Inc., has been announced by B. B. Gossett, who is to be chairman of the board. Royal Little, president of Textron, Inc., will be president of Textron Southern, Inc., according to the announcement. Textron Southern, Inc., was formed last May as a subsidiary of Textron, Inc., to acquire all outstanding stock of Gossett Mills and Chadwick-Hoskins. More than 98 per cent of the stock has been acquired and the merger has been approved by the boards of all the firms concerned, Mr. Gossett said. As a result of the merger, Textron Southern, Inc., will operate the 12 mills, including a finishing plant, in the

Anderson and Charlotte areas, with more than 200,000 spindles and 4,600 looms having a weekly capacity of 2,000,00 yards of cotton and rayon cloth and 250,000 pounds of cotton yarn. Present management will remain unchanged, said Mr. Gossett, adding that all the key officials of Gossett and Chadwick-Hoskins would occupy similar offices with Textron Southern.

PAW CREEK, N. C.—G & H Textiles, Inc., has been issued a charter of incorporation to operate a manufacturing business here, with an authorized capital stock of \$100,000 and subscribed stock of \$400, by James O. Graves, Mrs. Nannie Graves and Harold H. Helton, all of Paw Creek.

CHARLOTTE, N. C.—Lewith Mills, Inc., has been chartered to operate a manufacturing business in Charlotte, with an authorized capital stock of \$100,000 and subscribed stock of \$300, by Wilson Lewith, Louis S. Goodman and Arthur Goodman, all of Charlotte.

DUBLIN, GA.—Construction of a large woolen mill on the Oconee River, near Dublin, by the M. T. Stevens Co. of North Andover, Mass., has been approved by the Civilian Production Administration, and the project will get under way in the near future.

WESTMINSTER, S. C.—A three-story addition to the plant of Oconee Mills, Inc., is being erected with the use of materials from dismantled textile buildings in New England and at Swannanoa, N. C. The plant will be enlarged by about 30 per cent, and when the addition is completed approximately 200 more employees will be added. In addition to the new unit at the main plant, which will increase the mill space by 75,000 square feet, the dye plant that was built two years ago will be enlarged by approximately 5,000 square feet and new equipment will be added.

DAVIDSON, N. C.—The capital stock of Davidson Cotton Mills, Inc., has been acquired by Northern interests, and the mill hereafter will be operated as Davidson Corp., a Delaware concern. The new corporation is making plans for extensive additions and improvements to its Davidson properties. C. W. Byrd of Concord, N. C., who for the past ten years has been president and treasurer of the mill, will continue in the same capacity for the new organization.

#### Make First Shipments of New Fabric

First shipments of a new fabric containing aluminum yarns were made recently by the Cohn-Hall-Marx Co., division of United Merchants & Manufacturers, Inc. Initial shipments went to retailers with deliveries to some manufacturers scheduled for October. Early production of the fabric is still limited, with operations still in the pilot stage, it was announced. The aluminum yarn fabric is a yarndyed taffeta with viscose process rayon warp and viscose process yarn and aluminum yarn in the filling. An important feature of the aluminum yarns is that they will not tarnish, which permits cutters to operate farther ahead with these fabrics than was formerly possible with metals, since it is possible to store them.

# "I Knew Henley Would Have It"

Manufacturers of textiles have had more and more occasion to say that in recent days—although in all truthfulness it is not invariably the case!

But it is a fact that in spite of deplorably limited supplies and varieties of paper and paper products reaching the general market, HENLEY quotas have helped us meet many a customer's emergency.

Although admittedly HEN-LEY does *not* ALWAYS "have it," the percentage of "having" is most gratifying to our customers.

We Might Have What YOU Want!



Charlotte, N. C. HIGH POINT, N. C. Gastonia, N. C. Southern Paper Products Division, Asheville, N. C.

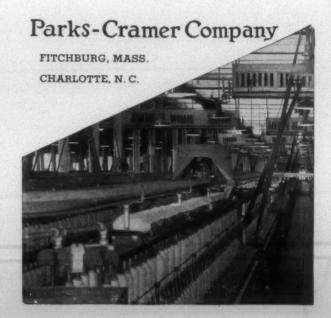


Rigged with ParksTurbo Traveling Cleaners, frames are blown off every three or four minutes.

Lint and fly do not get a chance to be spun into the yarn. They are shooed away.

Hand cleaning, done as often or as regularly, might be better. But what spinner would want to fan a frame (not to mention five or six) fifteen or twenty times an hour? Or who would want her to?

ParksTurbo Traveling Cleaners take the drudgery out of spinners' work—and earn their keep besides.



Promotions, Resignations, Elections, Honors, Honors, Appointments, Honors, Civic Transfers, Men in Uniform, Notes on Men in Activity and Associational Activity

## PERSONAL NEWS

H. B. Burks is now superintendent of Wehadkee Yarn Mills, Talladega, Ala.

Dr. Woodford G. Sink has joined the staff of the Institute of Textile Technology, Charlottesville, Va., to work in the field of stream sanitation. Dr. Sink formerly was textile chemist at Cannon Mills and more recently was an instructor at Georgia State College for Women.

George M. Wright, for many years president of the Republic Cotton Mills at Great Falls, S. C., recently acquired by J. P. Stevens & Co., Inc., will resign his position at the end of the year and retire to his home at Laurens, S. C.

Clinton W. Tasker has for the second time been awarded the Sylvania Division, American Viscose Corp., fellowship for the study of cellulose chemistry at McGill University, Montreal, Can.

George A. Howell of Rock Hill, S. C., has become manager and vice-president of Entwistle Mfg. Co., Rockingham, N. C. Leon Lowenstein of New York City has succeeded William Harry Entwistle as president

Harry A. Ficklin, who has been assistant overseer of spinning at the Pelzer, S. C., plant of the Kendall Co. for the post 18 months, is now general overseer of spinning at the Jackson mills, Iva, S. C.

Ben Crawford, director of training at the Lanett, Ala., plant of West Point Mfg. Co. for four years, has resigned to form Southeastern Engineering Co., with headquarters at West Point, Ga.

Courtland Palmer, treasurer of the Palmer Mills, Inc., Birmingham, Ala., has succeeded T. Reed Johnson of New London, Conn., as president of that company. J. B. McGinnis has resigned as superintendent.

- T. Holmes Floyd has succeeded L. H. Rice as manager of the Opelika (Ala.) Textile Mills.
- J. Harold Lineberger is now filling the position of secretary-treasurer at Linford Mills, Inc., Belmont, N. C.
- D. R. Whitener is now serving as superintendent of Waxhaw (N. C.) Spinning Co.

Donigan Dean Towers, vice-president and general manager of the Anchor Duck Mills, Rome, Ga., recently was honored when a new dormitory under construction at the Georgia School of Technology, Atlanta, was named for him. A graduate in textile engineering at Georgia Tech in 1902, Mr. Towers has been affiliated with a number of Southern textile concerns.

W. H. Trogdon has become associated with Dan River Mills, Inc., Danville, Va., as assistant superintendent of No. 2 carding and spinning and No. 8 spinning.

C. C. Dawson, former vice-president of Cramerton (N. C.) Mills, has been made general manager of the Cramerton Division of Burlington Mills Corp. A. L. McArthur, former Cramerton secretary, has been named divisional assistant general manager. Stuart W. Cramer and George B. Cramer have retired from participation in the management.

Jefferson H. Robbins has been appointed assistant superintendent of the Modena Plant of Burlington Mills Corp. at Gastonia,



BACK TO CIVILIAN LIFE: M. Leonard Slesinger, left, formerly of the Army ground forces, has been appointed Carolinas representative for the textile products division of Dexter Chemical Corp... John King, form-

er navigator for the Army Air Forces, has been appointed general manager of Blue Bonnett Blankets Mills at San Marcon, Tex. . . . Herring Winship, Jr., right, has rejoined Westvaco Chlorine Products Corp, as special representative attached to the firm's



Greenville, S. C., office. He served in the Army ordnance department for more than five years.

Clarence W. Jackson, who has been associated with American Thread Co. for the past 28 years, has been named plant manager for Lima (Ohio) Woolen Mills. Before his connection with American Thread Mr. Jackson held an executive position with Bristol (Tenn.) Mills.

C. H. Sanders, superintendent of Newton (N. C.) Rayon Mills, Inc., has been elected president of the Newton Kiwanis Club.

Oliver May has been appointed assistant treasurer in charge of finance at Textron, Inc., New York City; Sam S. Mullin assistant treasurer in charge of organization and policy; and Franklin H. Kissner controller. Mr. May will be responsible for financial matters; Mr. Kissner will head Textron's accounting staff, and Mr. Mullin will work in the fields of organization, administration and policy co-ordination.

Clarence H. Collier, Jr., has been appointed manager of the Industrial Life Truck Eastern Division of the Hyster Co., Portland, Ore., and Peoria and Danville, Ill. Mr. Collier's headquarters will be in Peoria.

Henry K. Kelly has been appointed manager of the Charlotte, N. C., sales office of American Viscose Corp., and S. Reed Anthony has been named assistant manager of the rayon staple sales division of the New York office. Mr. Kelly succeeds Harry L. Dalton, who recently was elected a director of the corporation. Mr. Dalton's duties will now consist largely of supervising the Southern sales area and general corporation matters. Mr. Anthony joined American Viscose in 1940 and prior to the war he was with the rayon staple division of the New York office and with the Charlotte sales office.

#### OBITUARY

John L. Dabbs, 72, a pioneer in the Southern textile chemical field, died recently at his home in Charlotte. Approximately two years ago he retired after serving 25 years as Southern sales manager for the E. I. du Pont de Nemours & Co. dyestuff division. Earlier he was Southern manager for National Aniline & Chemical Co. He is survived by his widow, a son, daughter, stepson and three grandchildren.

William A. Chappell, 54, assistant general sales manager for Bibb Mfg. Co., died Oct. 4 at Macon, Ga., after an illness of more than a year.

James S. Wilcox, 52, vice-president and treasurer of Johnston Mills Co. and an official of several of that firm's affiliated units, died Oct. 15 at Charlotte after a week's illness. Surviving are three sons and five brothers.

Frederick M. Prall, 52, director of the rayon technical patent section of E. I. du Pont de Nemours & Co., died Oct. 11 at Wilmington, Del., following a heart attack. In addition to his widow, he is survived by one son, two daughters and a sister.

**Dr. Joseph H. Percy**, director of chemical products in the research and development division of Colgate-Palmolive-Peet Co., Jersey City, N. J., and Dr. R. Max Goepp, Jr., director of organic research for Atlas Powder Co., Wilmington, Del., were killed in the crash of the American Overseas Airlines plane near Stephenville, Newfoundland, Oct. 3. The two scientists were en route to Germany for government-sponsored investigations.

# **Houghton Wool Tops**

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SUITABLE FOR BLENDS WITH RAYON OR COTTON

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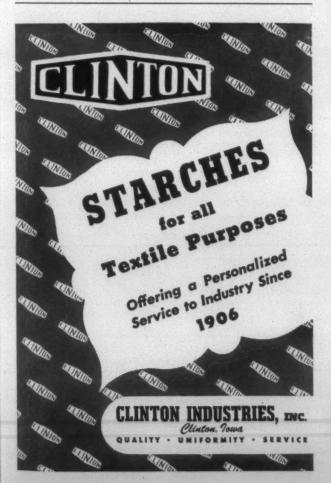
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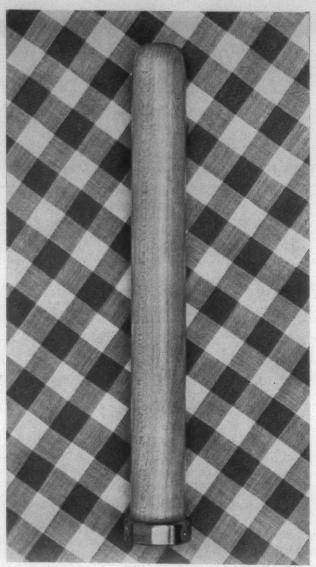
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SEYDEL-WOOLLEY & CO.

TEXTILE CHEMICALS







### PRECISION BOBBINS

Every New England Bobbin is checked for balance and concentricity of bore and outside diameter . . . . tested on customer's own spindle.

Every New England Bobbin must be PRECISION.

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# For the Textile Industry's Use

#### EQUIPMENT - SUPPLIES - LITERATURE

# Carbide Plant Is Planning New Administration Building

Officials of Carbide and Carbon Chemicals Corp. of Charleston, W. Va., recently announced plans for construction of a new administration building, possibly 15 stories high, as soon as necessary building materials become available. It was also announced that the process development laboratory now being erected would be ready for operation within three months. It is planned to set up looms in the laboratory to demonstrate Carbide's vinyon process for manufacturing hosiery and other apparel.

#### Gastonia Textile Machine Shop Destroyed By Fire

McKelvie Machine Co. of Gastonia, N. C., which suffered damages amounting to approximately \$100,000 when the plant was swept by fire Oct. 4, is expected to begin operations again as soon as equipment and materials can be reassembled. The McKelvie Co. is one of Gastonia's largest textile machinery manufacturing and service establishments. The blaze was discovered in the early morning hours but had gained so much headway before fire equipment could be brought to the scene that the building and contents were described as a total loss. H. M. McKelvie, head of the corporation, has located his office temporarily at Kempton Parts and Spring Co., 246 West Airline Avenue, Gastonia.

# Crane Reinstates Line Of Valves and Fittings

With the lifting of restrictions, the Crane Co. has announced reinstatement of its line of 18-8 Mo alloy steel corrosion-resistant valves and fittings, regular manufacture of which was discontinued during the war. The Crane 18-8 line, as reinstated, includes globe, gate, check, and relief valves in both screwed and flanged patterns, liquid level gauges, and screwed and flanged fittings. Sizes in screwed end patterns

are one-fourth to two inches, and in flanged end patterns are one to four inches. The valves and fittings are recommended for service in handling acetic acid, nitric acid, alum solutions, alkalies, limes, bleaching solutions, fatty acids, sulfurous acid and a large number of other industrial chemicals.

# Textile Supply Firm Develops New Product

An important new development in the textile machinery service field, production of the recently-perfected Alco Straightener, has been announced by A. M. Guillet, president of Dixie Spindle and Flyer Co. of Charlotte. This portable device offers a simple means through which trained or semi-trained employees can accurately straighten shafts. It has a 43-inch open end fully machined bed which is self-aligned and is equipped with ball bearing straightening ways, a one-ton capacity press with bronze ram, and variable anvil. Preliminary phases of tooling up for production of the Alco Straightener have been completed and its manufacture will be on such a scale that orders can be filled promptly, company officials disclosed.

# New Fungicide Product Offered For Textiles

Rot-Ban, a new control in a form easy and safe to use for canvas, rope and other textiles to give protection against parasites that rot away their usefulness, has been developed by Wilbur & Williams Co., Greenleaf and Leon Sts., Boston 15, Mass. The new product, it is reported, is not harmful to humans, causes no discoloration of goods nor lessens flexibility. It is a clear liquid product based on biological research conducted for the Armed Forces during the war, particularly for climates where fungus and mildew had to be brought under control. A technical sheet and further information on the product will be supplied by Wilbur & Williams Co. on written request.

#### New Solvay Technical Bulletin Announced

Solvay Sales Corp. has announced a new edition of Solvay Technical and Engineering Service Bulletin No. 5, Soda Ash. This new 64-page bulletin contains chapters on the properties of soda ash, bulk shipments, storage, conveying and elevating, unloading of bulk, unloading of bags and barrels, weighing, proportioning and feeding devices, sampling and analysis, precautions and conversion tables. This bulletin should be of interest to both operators and technical men in industries using soda ash, and is offered by Solvay without charge upon request to any branch office of the Solvay Sales Corp. or to its advertising and sales promotion department at 40 Rector Street, New York 6, N. Y.

# Republic Issues Booklet On Stainless Steel Use

A new booklet just published by Republic Steel Corp. of Cleveland, Ohio, discusses the use of stainless steel for dyeing and bleaching operations, including the modern continuous processes. Of special interest to dyehouse and bleachery superintendents are the sections on the choice of type of stainless steel for textile equipment and on the care of stainless machinery. The booklet is amply illustrated.

# Improved Hand Tachometer Announced by Zernickow

O. Zernickow Co. of New York has released a circular describing its O-Z Improved Hand Tachometers, a new line recently placed on the market by the company. Advantages listed for the O-Z Improved Hand Tachometer are its accuracy to within one-half of one per cent, its sturdy construction, perfect balance and a rotating gear shift said to eliminate all shifting troubles. Length of the tachometer is five and one-half inches and its weight is 19 ounces.

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Anhydrous & Aqua • HTH Products • Fused
Anhydrous & Aqua • HTH Products
Alkali Products • Synthetic Salt Cake • Dry Ice
Alkali Products • Sodium Chlorite Products
Sodium Methylate

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#### Du Pont Opening New Sales Office in Atlanta

E. I. du Pont de Nemours & Co. has announced that a new sales office for its organic chemicals department will be opened in Atlanta, Ga., Oct. 28. The new office, located at 1206 Spring Street, will distribute and service the products of the dyestuffs and fine chemicals divisions of the organic chemicals department. The need for increased facilities in these fields in the South has been indicated for some time, due to the growth of textile, paper and other industries in this area, the announcement said. Up to the present, all sales south of Virginia and east of Arizona have been handled from Charlotte.

The Charlotte office will concentrate its activities in North and South Carolina, while the rest of the Southern district east of Arizona will be handled from Atlanta. It is hoped in this way to increase service to customers, both as to technical assistance and more speedy distribution, the company said. Other activities may be added later as the need grows. Atlanta was chosen for the site of this new office because it is a business and rail center and a logical shipping point. Stocks of finished products will be carried in both Charlote and Atlanta. Complete facilities are being installed, including a complete dye application laboratory to render prompt and accurate service on technical problems.

D. C. Newman, who has been manager of the Charlotte office, will continue as sales manager in charge of the entire Southern district with headquarters in Charlotte. A. B. Owens, formerly sales development manager of the dyestuffs division in Wilmington, will be manager of the Atlanta office. R. D. Sloan, connected with the Charlotte office for many years, will be manager of the Charlotte office. Both offices will report to Mr. Newman. The sales and technical personnel now working out of Charlotte will continue to serve their customers as in the past and will be supplemented by returned service men now in process of training. The facilities and personnel of both offices will be available as needed for the entire district.

This move has been made to anticipate the expected industrial growth in the far South and Southwest, particularly in those chemical consuming industries other than textiles.

#### Alexander Brothers Offer Leather Packing Guide

Alexander Brothers of Philadelphia has recently issued a new *Hydraulic* and *Pneumatic Leather Packing Guide* which is of particular interest to the industry. The booklet presents the latest information gathered by field men, engineers and laboratory technicians and contains tables, drawings, engineering data and explanations of common-sense methods to assist in the proper design, application and maintenance of leather packings. A copy of the booklet will be supplied free on written request to Alexander Brothers, 406 N. Third Street, Philadelphia 23, Pa.

# Southern Packaging Corp. To Open In High Point, N. C.

The main offices and plant of Southern Packaging Corp. will be located in High Point, N. C., according to a decision reached at a directors' meeting of the corporation, was authorized to complete arrangements. Plans call for the building to be completed in approximately one more month, with machinery on order to arrive shortly thereafter. Directors of the new corporation are R. S. Dickson of Charlotte, N. C., Stark S. Dillard of Greensboro, N. C., Harry L. Dalton of Charlotte, Frank H. Driscoll of Winston-Salem, Earl N. Phillips of High Point, Murray Atkins of Charlotte, L. W. Driscoll of Charlotte, and O. A. Kirkman of High Point. Corporation officers are Frank H. Driscoll, president; Harry L. Dalton, vice-president; O. A. Kirkman, secretary-treas-

"In organizing the Southern Packaging Corp.," said Mr. Driscoll, "we are locating ourselves in an area convenient to our raw material needs as well as the center of a tremendous market for the type of packaging and packaging products which we will be equipped to produce." The firm will be equipped for making highly specialized packages such as bag containers of all types, fancy box covers, metal foil containers, package wraps and labels. It also will laminate fancy gift wrapping materials from aluminum foil, cellophane and paper for consumer use.

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#### Piping Layout Design Offered As New Service

Piping layout design is a new service inaugurated by the engineering department of Pennsylvania Flexible Metallic Tubing Co. of Philadelphia. This innovation was first tried out in answer to an apparent need. It met with such a welcome-especially from manufacturers and constructors whose engineering staffs were short-handed or who felt the need for specialized experience-that it was decided to make it a new departmental service. It includes, besides problems in piping layout, those involving absorption of line vibration, flexible connections, special fittings, the handling of pressure pulsations, changes in temperatures, water and air jacketing.

#### Du Pont Offers Color Conditioning Booklet

"Du Pont Color Conditioning for Industry," a new 32-page booklet illustrated in full color, is available on request to the Finishes Division, Dept. M-6, E. I. du Pont de Nemours & Co.,

Wilmington 98, Del. Illustrating and describing years of research and practical experience with color to increase production, improve seeing conditions and create a better working environment, the booklet makes clear the fundamental principles on which color conditioning is based. The Three-Dimensional Seeing treatment of machines is depicted with photographs of actual installations. The safety color code for industry is also outlined. Color conditioning is shown at work in plants of several well-known companies. A coordinated functional color program for an entire plant is illustrated in a double-page cutaway drawing.

#### Amalgamated Chemical Issues Product Folder

Textile chemicals made by Amalgamated Chemical Corp. are described in a new 12-page folder which discusses uses of and results achieved with detergents, water repellent finishes, hosiery finishes, wetting agents and penetrants, softeners and soaps. For a copy of this folder address Amalgamated

Chemical Corp., Ontario and Rorer Streets, Philadelphia 34, Pa.

Statement of the Ownership, Management, Circulation, etc., Required by the Act of Congress of August 24, 1912 and March 3, 1933.

of Textile Bulletin, published Semi-Monthly at Charlotte, N. C., for October

Monthly at Charlotte, N. C., for October 1, 1946.

State of North Carolina County of Mecklenburg

Before me, a Notary Public in and for the state and county aforesaid, personally appeared Junius M. Smith, who, having been duly sworn according to law, deposes and says that he is the Business Manager of Textile Bulletin and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management, etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in section of March 3, 1933, embodied in Section 537, Postal Laws and Regulations, to wit:

That the names and addresses of the publisher, editor, managing editor, and business managers are:

business managers are:
Publisher, Clark Publishing Co., Charlotte, N. C.; editor, David Clark, Charlotte, N. C.; business manager, Junius M. Smith, Charlotte, N. C.
That the owner is: Clark Publishing Co., Charlotte, N. C.
That the known bondholders, mortgages and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are: None.

(Signed) HAMILIS M. SALGERY

(Signed) JUNIUS M. SMITH, Business Manager.

(Signed) MARGARET L. ROBINSON Notary Publ

(My commission expires March 5, 1948.) Sworn to and subscribed before me this 23rd day of September, 1946.

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Your rayon warps will be smoother, stronger, cleaner, more resilient and more resistant to atmospheric action if you use Laurel Rayon Size. Unlike ordinary sizes, Laurel Rayon Size penetrates and envelops the yarn—binds the filaments together. It reduces chafing and breakage, increases elasticity, equalizes variations in yarn tension. Does not shed. Removed quickly and easily in regular scour. Laurel Rayon Size gives high loom efficiency. Leaves cloth soft, smooth with good appearance and with minimum defects.

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#### **Jacobs Rubber Products** Making Textile Items

Jacobs Rubber Products, Inc., of Danielson, Conn., a subsidiary of E. H. Jacobs Mfg. Co. of the same city, announces a long list of textile products developed and tested during the war when the factory devoted its entire output to military requirements. Using Buna N, S, Neoprene and other synthetic rubber compounds, the following

products are currently being produced: pickers, picker stick and spindle rod bumps, spinning cots and temple roll tubing.

#### Vinyl Butyral Available For Stainproof Fabrics

Monsanto Chemical Co. has announced its vinyl butyral plastic, long used as an interlayer material in safety glass, is ready for a broadscale entry

into the textile coating field. In sharp contrast with familiar rubberized or oilcloth type coatings, it was said, the new application affords resistance to stains and water while allowing the fabric to retain its original identity.

"In other words," explains S. L. King, manager of the vinyl resins department of Monsanto's Plastics Division, "the cloth continues to have most of the eye and touch appeal of a normal fabric. Yet it loses none of the functional properties of a coated textile." In the mill application process, he continues, there is bonded to the fabric a super - thin, almost - invisible coating of flexible and transparent vinyl butyral-so tightly adhering that it will not chip or peel under normal usage, and so inconspicuous that only an expert can visually distinguish a properly coated cloth from an untreated companion cloth.

Monsanto emphasizes that it neither supplies fabrics, coats textiles nor sells the finished material. Its function is merely that of a supplier of the plastic and of the know-how required to apply it. It was also emphasized the plastic is for application in the processing, or "proofing" mill only. The vinyl butyral plastic is being produced in commercial quantities at Monsanto's Springfield (Mass.) plant.

#### Du Pont To Enlarge Manufacturing Plants

E. I. du Pont de Nemours & Co. has announced plans to enlarge its synthetic detergent plant at Deepwater, N. J. The Civilian Production Administration has approved approximately \$600,-000 of new construction. The Du Pont Co. feels there is a great future ahead

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for synthetic detergents, regardless of the possible available supply of animal fats, the announcement said. These detergents, or so-called "soapless soaps," which do not use animal fats—their starting material being a petroleum fraction—produce more suds in hard water or cold water than ordinary soaps, and leave so scum or greasy curd. They can be used in neutral, acid or alkaline solution and do not become rancid on ageing. For these reasons, it is expected there will be ahead a constantly expanding market.

The company also has announced plans for construction of a new unit on its electrochemicals plant site at Niagra Falls, N. Y., for the production of one of the main chemical intermediates used in the manufacture of nylon. The project, estimated to cost about \$3,000,000, will require about 15 months for construction.

## Carolina Industrial Films Announces Textile Series

Carolina Industrial Films, 125 W. First St., Charlotte, N. C., announces the production of a series of films planned to cover basic textile operations. The newly organized firm will produce films in full color with sound and they will be made available to textile schools and manufacturers.

#### Dye Staining Technique Covered In Booklet

A new bulletin, "A Dye Staining Technique for Studying Shrinkage Control Imparted to Cotton by Melamine Resins," has been announced by the textile resin department of American Cyanamid Co. The bulletin discusses the correlation between variable direct dyestuff pick-up and shrinkage control in fabric that has been treated with methylated methylol melamine resins. The bulletin is available upon application to the Textile Resin Department, American Cyanamid Co., Bound Brook, N. J.

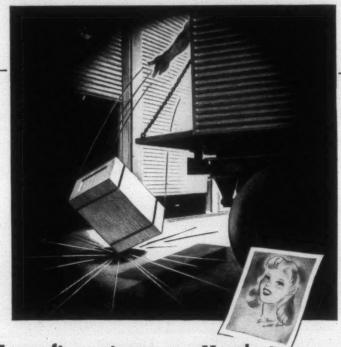
# Fifth Dexter Booklet Covers Mercerization

The textile chemical division of Dexter Chemical Corp. has issued the fifth and last booklet in a series of reprints on the mercerization process. The booklet, Luster Determination With a Photoelectric Photometer, prepared by Henry Ransom and Sidney M.

Edelstein, explains in detail the steps to be followed in determining the luster of mercerized material, including a description of the apparatus for measuring light reflectance and its arrangement. Copies are available by writing to Dexter Chemical Corp., 819 Edgewater Road, New York 59, N. Y.

# Brown Expands Sales And Service Staffs

A group of 45 new sales and service engineers have been added to the expanded field staff of the Brown Instrument Co., Philadelphia. "The addition of 25 sales engineers and 20 service men," according to W. H. Steinkamp, field sales manager of the industrial division of Minneapolis - Honeywell Regulator Co., "is further evidence of the overall growth and expansion of our activities." The group of 45 sales engineers and service men will be assigned, about the first of the year, to various regional offices and branches throughout the country, said Mr. Steinkamp. All of the men are now attending the Brown School of Instrumentation at Philadelphia.



Forty-five minutes to Myrtle and ten deliveries to go!

Put yourself in Joe's place up there in the truck. You've got just forty-five minutes to make the last ten deliveries and meet Myrtle. If something's going to get busted, it better be one of the deliveries . . . not the date.

Now climb down out of that truck and face some of the facts of life and of shipping. The human factor is always a shipping hazard . . . and the Stanley Steel Strapping System assures the protection you need for your

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. . . case, crate, carton, bale or reel
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   6—Frames as above, except conventional draft.
   2-52-spindle, 12 x 6 Woonsocket Slubbers.
   30—Deliveries, Lowell drawing with 12-inch collers.

- 30—Deliveries, Lowell drawing with 12-inch collers.
  8—Davis & Furber, 48 roll top cards equipped with new two lap feed, two 12-inch coiler heads for each card. Seven of these cards are complete and ready to go with all new clothing.
  2—100-spindle Foster Winders with cone attachments equipped for motor drive, but motors not included. New 12-inch drawing cans, bobbins, etc.

#### FOR SALE INDIVIDUALLY

- 2—128-spindle F & J Twisters, 4-inch gauge, 3-inch ring, band drive.

  1.—Foster "12" 100-spindle Winder with cone attachment, belt drive.

  1.—100-spindle Whitin Spooler, 4½-inch gauge, band drive.

  1.—100-spindle H & B Spooler, 4½-inch gauge; tape drive.

  5,000 spools for above spoolers.

Please address inquiries to Box 227 or Telephone 48. Statesville, N. C.

#### WANTED TO PURCHASE

- 2-Medium size textile mills; one on high grade drills, the other on broadcloth for shirts, pajamas, shorts, etc.
- 3-Print Cloth Mills-20,000; 40,000, and 60,000 spindles and necessary looms. All information strictly confidential.

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#### AVAILABLE

TEXTILE EXECUTIVE-Twenty-five years' experience as Manager large textile organizations. Thorough mechanical background and thoroughly familiar with all phases of cotton textile manufacturing. Technical training. Enviable reputation labor relations. Presently employed but desire to make change. Will consider salary and

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GBC" Belt Cement
BILTRITE Canvas Lug Straps.
DAYTON "Thorobred" Loom Supplies. DAYTON V-Belts and Pulleys.

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One 100 - Spindle Barber - Colman Spooler. Purchased new 1923. No Trident or Cheeses. Good condition. \$5,500 net mill floor. Subject to prior sale.

Write "Trident," care Textile Bulletin, P. O. Box 1225, Charlotte 1, N. C.

#### WANTED

Overseer of Weaving. Please give age, experience and other qualifications and refer-

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WANTED—Position as Plant Overseer. Experienced on Carding, Spinning, Ring Twisting, Winding, Tube Twist and Polishing Cotton, Waste and Rayon. Employed; age 38, sober and reliable. Write "T. W. T.," care Textile Bulletin, P. O. Bex 1225, Charlotte 1, N. C.

WANTED—Instructor in carding and spinning at North Carolina Vocational Textile School. Reply to P. O. Box 349, Belmont, N. C., or Telephone 445.

WANTED—By man with 30 years' experience as overseer of carding and spinning and superintend-ent—to contact mill in need of a progressive su-perintendent. Write "Spinning," care Textile Bul-letin, P. O. Box 1225, Charlotte 1, N. C.

POSITION WANTED by experienced second hand and overseer of spinning; pusher; I. C. S. student; one year's experience erecting new Whitin spinning machinery; 34 years old, married and two children. Navy veteran. Write "W. W. W.," care Textile Bulletin, P. O. Box 1225, Charlotte 1, N. C.

Superintendent available, 44 years old, Protestant religion, sober, good health. High School and I. C. S. Textile graduate, 25 years' experience in the mill, eleven years' experience in the mill, eleven years' experience as General Overseer. Last eight and a half years as Superintendent. Experienced on spun rayon, combed and cotton yarn. Six years as Yarn Mill Superintendent, two and a half years weave Mill Superintendent. Can go anywhere. Write "Textile Graduate," care Textile Bulletin, P. O. Box 1225, Charlotte 1, N. C.

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Two experienced Stafford Loom Overhaulers, 3 A-1 Loom Fixers. Pay above average.

Write "Loom," care Textile Bulletin, P. O. Box 1225, Charlotte 1, N. C.

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7—Universal Copping Machines, No. 90, to take 8½" bobbin, equipped with disc quill tension and bunch builders.
 10—½ H. P., ½ H. P. or 1 H. P. Motors, 550 volts, 60 cycles, 3-phase, 1750 R.P.M.

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Flat Belt Conveyor, 36 ft. long, 36 in. wide, reversible motor, and all connections for remote control.

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#### WANTED TO PURCHASE

- 1-Leather Breaker Picker.
- $3-7\frac{1}{2}$  H. P. new or good used Motors, 220 volts, 3-phase, 60 cycles, 1200 R. P. M.
- 2—15 H. P. new or good used Motors, 220 volts, 3-phase, 60 cycles, 1200 R. P. M.
- 2—Four delivery Drawing Frames, metallic rolls preferred.
- 2,000—Int. Bobbins for 10 x 5 frames, 200 roving cans, 12" coiler.

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Write "L. C. L.," care Textile Bulletin, P. O. Box 1225, Charlotte 1, N. C.

# Index to Advertisers

| Pa   |
|--|
| American Cyanamid Co. (Textile Resin Dept.)                            |
| American Moistening Co.  |
| American Moistening Co.  American Paper Tube Co.                       |
| American Textile Sheet Metal Works                                     |
| Armour & Co. (Industrial Soap Div.)                                    |
| Armstrong Cork Co.   |
| Arnold, Hoffman & Co.  |
| Ashworth Bros.   |
| Hahnson Co. The  |
| Bahnson Co., The<br>Baily & Co., Inc., Joshua L.                       |
| Barber-Colman Co.  |
| Barber-Colman Co. Barnes Textile Associates                            |
| Dart & Co Pdward U   |
| Best & Co., Edward H. Blackman-Uhler Co., Inc.                         |
| Brackman-Unier Co., Inc.   |
| Borne, Scrymser Co. Brooklyn Perfex Corp.                              |
| Brooklyn Perfex Corp. Burkart-Schier Chemical Co. 64 and               |
| Burkart-Schler Unemical Co. 64 and                                     |
| Burlington Engineering Co. (Graham Chem Co.)                           |
| Butterworth & Sons Co., H. W. 22 and                                   |
| Carolina Industrial Films  |
| Carolina Refractories Co.  |
| Carter Traveler Co. (Div. of A. B. Carter, Inc.)                       |
| Charlotte Chemical Laboratories, Inc. Charlotte Leather Belting Co.    |
| Charlotte Leather Belting Co.  |
| Ciba Co., Inc.   |
| Clinton Industries, Inc.   |
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| Curran & Barry   |
| D & M Plating Co.  |
| Curran & Barry D & M Plating Co. Dary Ring Traveler Co.                |
| Dayton Rubber Mfg. Co.   |
| Dayton Rubber Mfg. Co. Denison Mfg. Co.                                |
| Dodenhoff Co., W. D.  Draper Corporation                               |
| Draper Corporation   |
| Dunning & Boschert Press Co.   |
| Du Bent de Nemoure & Co F T  |
| Dyestuff Division  |
| Faton Paul B   |
| Emmons Loom Harness Co.  |
| Eaton, Paul B. Emmons Loom Harness Co. Engineering Sales Co. Front Co. |
| Eveel Tevtile Supply Co  |
| Excel Textile Supply Co. Foster Machine Co.                            |
| Franklin Process Co.   |
| Fuller, Frank F.   |
| Fuller, Frank F. Gastonia Roller, Flyer & Spindle Co.                  |
| Casaral Deceted Com  |
| General Dyestuff Corp. Gossett Machine Works                           |
| Gossett Machine Works  |
| Greenville Belting Co.   |
| Gulf Refining Co.  |
| Hanks, W. E.   |
| Hart Products Corp.  |

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Either up-stroke or down-stroke baling press with or without tramper, suitable for baling cotton or cotton linters.

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| loughton Wool Co.   | 59                   |
| loward Bros. Mfg. Co.   | 18                   |
| ndustrial Cooling & Moistening Co   |                      |
| selin-Jefferson Co.   | 78                   |
| ohnson Chemical Co.   |                      |
| Geever Starch Co.   |                      |
| Leystone Belting Co   | 68                   |
| Cimmel Machinery Co., Leon  |                      |
| ambeth Rope Corp.   | 74                   |
| awrence Leather Co., A. C.  | 53                   |
| aurel Soap Mfg. Co., Inc.   |                      |
| uttrell & Co., C. E.  | 63                   |
| Marquette Metal Products Co.  |                      |
|   | 39                   |
| fathieson Alkali Works  | 61                   |
| derrow Machine Co., The   | 91                   |
| foreland Chemical Co., Inc.   | 76                   |
| dount Hope Machinery Co.  |                      |
| National Aniline & Chemical Co.   |                      |
| lational Ring Traveler Co.  |                      |
| (eisler Mills   |                      |
| lew England Waste Co.   | 59                   |
| Voone & Co., Wm. R.   |                      |
| Onyx Cil & Chemical Co.   | 6                    |
| Page Belting Co.  | 80                   |
| Parks-Cramer Co   | 57                   |
| Peach & Co., D. W.  |                      |
| Paniels & Tord Ttd Tre  | 85                   |
| Penick & Lord, Ltd., Inc.   | 24                   |
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| Pittsburgh Plate Glass Co., Columbia  |                      |
| Div.  | 62                   |
| Proctor & Schwartz  | 12                   |
| Ray Chemical Co.  | 83                   |
| Raybestos-Manhattan, Inc. (North Char   | eleston              |
| A LUCALUT   | 87                   |
| Raymond Service, Inc., Chas. P.   |                      |
| Rice Dobby Chain Co.  | 72                   |
| Rohm & Haas Co.   | 4                    |
| Roy & Son Co., B. S.  |                      |
| Saco-Lowell Shops   | 92                   |
| Sandoz Chemical Works, Inc.   | 24 and 25            |
| Scott Testers, Inc.   | 24                   |
| Seydel-Woolley & Co.  | 59                   |
| Sinclair Refining Co.   | 26                   |
| Sirrine & Co., J. E.  |                      |
| Socony Vacuum Oil Co.   | 68                   |
| Solver Sales Gern   | 29                   |
| Solvay Sales Corp.  | 73                   |
| Southern Belting Co   | 16                   |
| Southern Spindle & Flyer Co.  | 91                   |
| Southern Standard Mill Supply Co.   |                      |
| Staley Sales Corp., A. E.   | 45                   |
| Stein, Hall & Co.   | 63                   |
| Sterling Ring Traveler Co.  | 85                   |
| Stevens & Co., Inc., J. P.  | 84                   |
| Terrell Co., The  | 85                   |
| Textile Service Co.   | 91                   |
| The Stanley Works   |                      |
| U. S. Ring Traveler Co.   |                      |
| Union Supply & Electric Co.   | 78                   |
| Universal Winding Co.   | 31                   |
| Virginia Smelting Co.   |                      |
|   | 69                   |
| Vogel Co., Joseph A.  | 76                   |
| Wallerstein Co., Inc.   | 72                   |
| Warwick Chemical Co.  | Back Cover           |
| Water Tank Service Co.  |                      |
| Wellman Operating Corp.   | 91                   |
| Wellman Operating Corp  | 21                   |
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Page

POSITION WANTED as Superintendent. Experienced on plain weaving, also combed or carded yarns, both fine and coarse. Employed as superintendent at present. Good reason for changing. Prefer mill that is not getting desired results. Practical throughout mill. Do not drink. Can furnish the very best of references. Will go anywhere in the South. Write "L. O. V.." care Textile Bulletin, P. O. Box 1225, Charlotte 1, N. C.

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as Master Mechanic. Eight years' experience as assistant master mechanic of a large plant and experienced as second hand. Can furnish best of references. Reply

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POSITIONS OPEN IN SOUTHERN MILLS—MEN WANTED: Manager warp knitting mill; managers, superintendents, overseers of knitting, cutting, finishing and stitching and sewing machine and knitting machine fixers for mills making underwear, hosiery, polo shirts, pajamas, etc.; manager spun rayon yarn and cloth mill; three boss dyers for cotton raw stock, yarns and piece goods; foreman hosiery looping and young woman inspector; overseer spinning, spun rayon; boss dyer, also boss finisher for rayons; overseer cotton spinning; foreman, also chemist for pyroxylin and vinyl; wool scouring foreman; time study men; boss carder, \$65; cotton mill master mechanic. Also superintendent cotton yarn mill in South America, \$10,000 year; Draper loom fixer for South America, \$60 a week, board and room and transportation paid; and many others.

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Over 45 years Confidential Employment Service for textile mills. We invite correspondence with executives seeking positions and employees seeking new executives.



More than 400 persons visited Raleigh, N. C., Sept. 28 as guests of the North Carolina State College school of textiles for Textile Manufacturers Day. In the top picture, Chancellor J. W. Harrelson welcomes the visitors. Others shown, left to right, are: Elliot Grover, head of the school's yarn manufacturing department; John Clark, president and treasurer of Locke Cotton Mills Co. at Concord, N. C., and Randolph Mills, Inc., at Franklinville, N. C.; J. C. Cowan, vice-president and general manager of Burlington Mills, Inc., Greensboro, N. C.; George S. Harris, president of Dan River Mills, Inc., at Danville, Va., who is just behind Dean Malcolm E. Campbell; Lieut.-Gov. L. Y. Ballentine of North Carolina, just behind Colonel Harrelson; J. Spencer Love, president and treasurer of Burlington Mills Corp.; W. D. Carmichael, Jr., compresident of the University of North Carolina; W. J. Carter, president and treasurer of Carter Fabrics Corp. at Greensboro; and David Clark, editor of TEXTILE BULLETIN. The lower picture shows guests lining up for the buffet lunch served by the school.



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#### Rayon Shipment Figures Are Released

Total rayon shipments during September amounted to 67,900,000 pounds, six per cent below the August total of 72,400,000, according to the Textile Economics Bureau. In the nine months of 1946 deliveries of rayon have reached 626,300,000 pounds, 11 per cent above the corresponding 1945 period shipments of 566,200,000 pounds.

Compared with August, September deliveries of filament yarn and staple fiber were reported by the bureau to be six per cent and seven per cent lower, respectively. These lower rates principally reflected the fewer number of working days in September, as well as the Labor Day holiday.

September filament yarn shipments were reported at 53,-900,000 pounds (40,100,000 pounds of viscose plus cupra and 13,800,000 pounds of acetate), while staple fiber deliveries aggregated 14 million pounds (10,700,000 pounds of viscose and 3,300,000 pounds of acetate).

January-September shipments were reported as 492,800,000 pounds of filament yarn, of which 357,200,000 pounds were viscose plus cupra and 135,600,000 were acetate. Staple fiber shipments in the same period totaled 133,500,000 pounds, with viscose amounting to 109,900,000 pounds and acetate 32,600,000 pounds.

This shows for the first nine months, compared with 1945, a rise of 12 per cent in viscose cupra filament shipments, a rise of eight per cent in acetate filament yarn, ten per cent in viscose staple fiber and 14 per cent in acetate

Rayon stocks held by producers at the end of September showed only nominal changes from those at the end of August and continue at very low levels. At the end of September producers held 6,500,000 pounds of viscose plus cupra yarn, 2,400,000 pounds of acetate yarn and 2,600,000 pounds of staple fiber.

#### Export Set-Asides Reduced Again

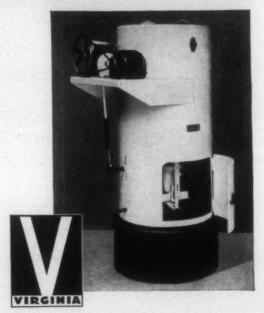
Reflecting improved production of cotton textiles abroad, the Civilian Production Administration has announced a reduced set-aside-for-export quota for the fourth quarter of 136,000,000 linear yards. This is a reduction of about ten per cent from set-asides for the third quarter, which amounted to 151,000,000 yards, and marks the third straight quarter in which reductions have been made, C.P.A. said. The set-aside for export to Canada remained the same as the third quarter at 15,000,000 yards.

At the same time, C. P. A. authorized the Office of International Trade to license, but without set-asides or priority support, an additional 15,000,000 yards, which would have to be bought in the open market. O. I. T. may also license up to 25,000,000 yards of cotton textiles from military surplus, excluding osnaburgs, coarse sheetings, medium sheetings, print cloths, drills, twills (including herringbone twills), denims, chambrays and canton flannels. The listed items are in such short supply that it was felt any of them in military surplus should be held for the domestic market.

C. P. A. and O. I. T. officials pointed out that cotton textile production is believed to be considerably improved in France, Italy and Japan. Japan, for example, is expected to have available for export up to 175,000 yards in the fourth quarter. It was pointed out that quarterly export quotas are ceilings, and that actual exports will probably no reach that amount. Individual quotas for applicant countries are set by O. I. T.

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#### Wool Set-Asides Stopped By C. P. A.

Manufacturers of wool fabrics will no longer be required to set aside part of their production for low-cost clothing, Civilian Production Administrator John D. Small stated Oct. 1 in announcing the government's fourth-quarter plan. The wool set-asides have been removed because supplies of wool fabric now seem large enough that manufacturers do not need general priorities assistance to obtain them, Mr. Small said.

Manufacturers of wool items, if they qualify under Schedule K (wool) of M-328B, may get special priorities assistance during the fourth quarter to secure wool body fabrics or rayon and cotton fabrics for linings and components if necessary to maintain maximum production. The items, including the base period and the current price, are the same in the fourth quarter program as they were in the third quarter.

Meanwhile, Mr. Small said, C. P. A. will continue to require cotton and rayon mills to set aside, or reserve, certain amounts of their fabrics for essential civilian clothing. It is estimated that during the fourth quarter the program will put into these essential garments approximately 255 million yards of cotton goods (including 45 million yards for retail sale over the country), and about 146 million yards of rayons (including 20 million yards for over-the-counter sale). These are roughly the same as the third quarter figures except for over-the-counter cotton goods, which amounted to 62 million yards in July, August and September. The difference in yardage has been transferred to the industrial and agricultural set-aside in Order M-317A, (cotton fabric distribution), where it will be available for over-the-counter sale.

#### CELEBRATING 50 YEARS' SERVICE



Stonewall (Miss.) Cotton Mills employees, along with the rest of the community, turned out Sept. 28 to celebrate with Thomas J. Harper his 50th year of service as purchasing agent for the firm. At extreme left above is Mrs. Harper, to whom the honoree has been married 46 years. Next is Mr. Harper and at center is Benjamin F. Berman, vice-president and treasurer of Stonewall Cotton Mills, who was master of ceremonies and sponsor of the occasion. Shown at right is Mayor Frank Jacobs of nearby Meridian, Miss., as he appointed Mr. Harper honorary chief of police in that community. At 73. Mr. Harper is still actively in charge of the firm's purchasing department. A number of gifts and testimonials were presented to him during the ceremony.

#### Mixed Fabric Weavers Get Price Relief

Squeezed by the recent sharp rises in cotton costs, producers of fabrics and yarns made from wool or rayon mixed with cotton have been given price relief to compensate for the two August advances in cotton yarn, the Office of Price Administration announced Oct. 2. The increases are to be figured on the basis of cotton content and will vary for different yarns and fabrics. In most of the fabrics affected, the cotton content is less than half. Based on an approximate rise of 12 cents a pound in the cost of cotton yarns, the increase permitted will not exceed six cents a pound, or one or two cents a yard, the price agency said. For example, a typical yarn, made up of about 40 per cent cotton and the rest wool, will receive a price of about five cents a pound. In a fabric measuring three yards to a pound, this would be 1 2/3 cents a yard. Reflected at retail in the prices of clothing made from the blended fabrics, the effect will be slight.

With the passage of the new price control law, which prevents O. P. O. from placing ceilings on raw cotton which has already required considerable increase in cotton yarn ceilings, cotton costs have loomed larger than usual in relation to the non-cotton content. The present action is taken to relieve this abnormal cost relationship. O. P. A. pointed out that the increase is not based on a showing by the industry that earnings have been depressed below the 1936-39 average but solely on recognition that the industry has been placed in hardship by the recent changes.

Producers are to figure their new ceilings from increase factors provided in the amendment for cotton yarn, multiplied by the amount of cotton in the fabric or yarn. The new prices are to be reported to O. P. A., according to reporting provisions outlined in the action. The increases cover only the Aug. 5 and Aug. 30 advances in cotton yarn. No further increase will be made unless an additional sharp rise in cotton costs necessitates revision, O.P.A. said. The agency emphasized that no escalation system is necessary, as the prices of mixed fabrics and yarns are not tied directly to cotton costs as in the case of cotton textiles.

#### Cotton Imports Total 57 Million Pounds

A Treasury Department report on Sept. 12 reveals that the United States imported 57,409,837 pounds of cotton during the past year. Egypt and the Anglo-Egyptian Sudan supplied the largest amount, 33,880,212 pounds of longstaple cotton. Peru furnished the next biggest total with 11,771,556 pounds of long staple and Russia sent 4,551 pounds. Brazil, with 100 pounds and French Africa with one, filled the quota of 45,656,420 pounds. Cotton with staple length less than one and one-eighth inches totaled 11,753,417 pounds, somewhat below the quota of 14,516,-882 pounds. Four countries furnished this cotton as follows: Mexico 8,883,259 pounds, British India 2,003,483, Brazil 618,723 and Peru 247,952.

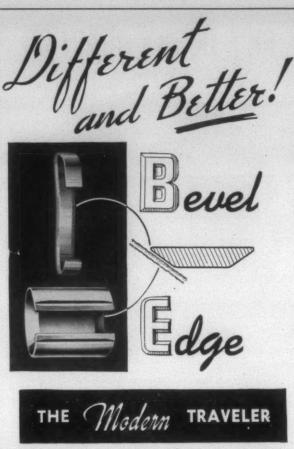
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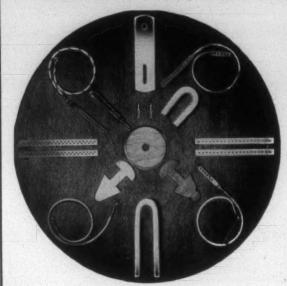
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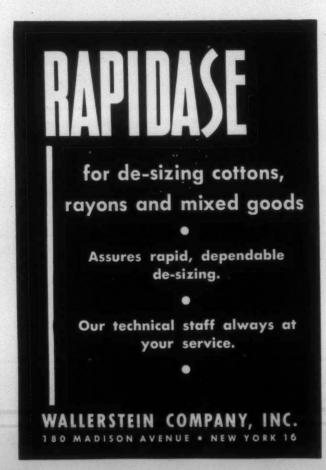


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#### Mildew-Resistant Needs Are Surveyed

A wide variety of fabrics products—from beach furniture to fire hose—are potential beneficiaries of mildew-resistant finishes, the tabulated results of a textile mill survey recently made by Givaudan-Delawanna, Inc., reveal. The survey was made in order to determine the demand for Compound G-4 (dihydroxy-dichloro-diphenylmethane), a mildew-resistant chemical product developed by Givaudan-Delawanna for the protection of textiles in the tropics during the war, and successfully used by the armed forces on tents, mosquito netting, sleeping bags, and many other fabrics.

The 99 mills participating in the survey listed the following requirements for mildew-resistant finishes: odorless, weather resistant, non-toxic, durable, permanent, heat and light resistant, non-corrosive, water resistant and flexible.

The survey asked the question: "In the opinion of the technical and production departments of your organization, which type of mildew-resistant finish is to be preferred?" Sixty-three mills answered this question—36, or 57 per cent preferred chlorinated phenols; 15, or 24 per cent, mercurials, and 12, or 19 per cent, metallic soaps.

#### New Maid of Cotton To Be Chosen

A search for the cotton industry's 1947 Maid of Cotton began this month as the National Cotton Council announced qualifications for the contest which will terminate with the selection of a maid and two alternates in Memphis next Jan. 13. The girls named as 1947 Maid of Cotton will make a nationwide tour as goodwill and fashion ambassador of the cotton industry. The council said that the five-month tour, scheduled to open in Miami early in February, would be extended to cover leading cities on the West Coast in 1947.

Any girl who is a native of one of the cotton-producing states, who is between the ages of 18 and 25, and who has never been married is eligible to participate in the contest, the council announced. The girl selected for the Maid of Cotton assignment will succeed Miss Gwin Barnwell of Gastonia, N. C., and Greenwood, Miss., the 1946 Maid of Cotton. During the first half of the year, Miss Barnwell visited 35 major cities in all sections of the United States except the Far West, appearing as featured model in cotton fashion shows and extending the cotton industry's greetings to civic leaders, city, state and Federal officials.

#### Request for Loom Control Cut Made

A recommendation that loom controls be cut 50 per cent was made by a group of cotton consultants who met recently with Civilian Production Administration officials in Washington. Arguing that the abnormally high price of raw cotton and uncertain market conditions require greater flexibility for planning, the mill representatives told C. P. A. that the present loom order, L-99, forces them to make "substandard" fabrics for which demand is dropping. They said they feared they might lose money on unwanted production if controls were continued too long in their present form. Several cases were mentioned in which customers turned down chances to buy material—something which never was done six months ago.

C. P. A. officials told the consultants that they would give serious consideration to the committee's recommendation. However, they pointed out, C. P. A. alone does not make final decisions about changing textile orders. Other government agencies have a voice in such matters. C. P. A. spokesmen said that these agencies would be given an opportunity to present their views on relaxing L-99, and that the various industry divisions within C. P. A. itself would also be consulted.

The consultants also said that since the "profit bonanza" is ending, cotton weavers want to get back to serving their regular customers as quickly as possible. Present controls, they said, make it difficult to do this. The consultants pointed out that it now takes an unusual length of time to make loom changes, partly because of labor shortages and partly because of the difficulty of getting gears, harnesses and other loom parts. If the mills are to begin making new types of material during the first and second quarters of next year, they must begin planning now for those changes, and must therefore know what C. P. A. regulations will be in effect in the future.

C. P. A. officials told the committee that, while they want to reduce controls as fast as possible, they also want to be sure that the nation's basic textile needs will continue to be met during the next six months. They said that if supplies of fabrics for low-cost apparel, bags and industrial and agricultural users become critically short as a result of relaxing controls, intense pressure would be brought to bear, not only on C. P. A. but on government as a whole, to bring back even more stringent controls than had been in effect. Thus concrete assurance that these needs would not suffer would help materially in making it possible to reduce loom controls, C. P. A. said.

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Members of the consultants' group who attended the meetings were: Walter S. Montgomery, chairman of the board of the American Cotton Manufacturers Association, chairman of the consultants' group; A. F. Bonsal, Joshua L. Bailey & Co.; George P. Barnwell, Bibb Mfg, Co.; J. E. Bradley, Pacific Mills; George P. Swift, Muscogee Mfg. Co.; John Hughlett, Dan River Mills, Inc.; and George Westberg, Berkshire Fine Spinning Associates. Present also at part of the meetings were Dr. William P. Jacobs, president of the American Cotton Manufacturing Association; W. Ray Bell, president of the Association of Cotton Textile Merchants; and Dr. Claudius T. Murchison, president of the Cotton-Textile Institute.

#### South Carolina S. T. A. Discusses Safety

(Continued from Page 47) aid. If there is any doubt concerning the seriousness of the injury, the employee is sent to the doctor or carried directly to the hospital. Lists are made at each first aid station of all injuries, and the supervisor is responsible for following up each injured employee to see that continued treatment is given where necessary. On the bottom of each month's list of injuries is a short safety-program message. A representative of the insurance company attends each monthly meeting and brings an accident-of-the-month message. Occasionally moving pictures of safety are shown or a special guest is invited for a short talk on safety.

Summing up this program, you can readily see that the major responsibility for accident prevention work is placed on the supervisory personnel. The Springs management feels that a thorough, systematic, workable safety program, but one that does not take precedence over all other matters pertaining to manufacturing, is very necessary and ad-

when beauty calls for science



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vantageous to the mills. This is evidenced by the low lost-time frequency record at the Lancaster plant for this year through Oct. 1.

#### DISCUSSION

MR. TEMPLETON: I should like to ask Mr. Green how in the world they got their accident-frequency rate down so low. I did not know anyone had a rate that low.

Poutlbk

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MR. GREEN: I don't know, except that we keep working on it. We have not put it ahead of everything else, but the men on the supervisory staff have been sold on accident prevention, and they follow it up.

# The Value of Pre-employment Physical Examinations-I

By W. M. PITTENDREIGH, Superintendent Laurens (S. C.) Cotton Mills

THE first thing that pre-employment examinations reveal is physical defects such as rupture, defective visition, dermatitis, tuberculosis, and physical deformity. Knowledge of these may later eliminate fraudulent claims for personal injuries. From past experience, our rejects will fall into the classifications of venereal disease, varicose veins, high blood pressure, hernia, defective vision, pregnancy, infected extremities, low blood pressure, dermatitis, phlebitis, nervousness, diabetes, and case histories.

Our policy on venereal disease is to explain to the applicant that, should the blood test findings be returned to us as positive, we shall require a second test. If the second test also shows positive the applicant is turned over to the family physician. If any are unable to pay for the treatment, however, then they are turned over to the health department with the understanding that they must take the treatment or be dismissed. Any persons who are in an infectious stage are encouraged to go to the venereal disease hospital in Columbia, and the health department makes the arrangements. We do not let anyone continue working in our plant while in the infectious stage. In other words, their employ is deferred until such time as they are classified non-infectious.

You can readily understand having a policy against hiring a person with hernia, because we know that usually the finding under the workman's compensation act is that, even though a man has a hernia when he is employed, should it become aggravated after he is employed you must repair this hernia. As to defective vision, a person might be partially blind when employed; but, should he be in any way injured so as to impair the vision further, you are responsible for the total disability of that person. We do not hire anybody with defective vision unless it can be corrected by glasses.

We hire no pregnant women because it is so easy for them to do something on or off the job which might cause miscarriage, and the blame is usually placed on the operation which they perform in your plant. Neither do we hire those with infected extremities, because of the inclination of some people to claim rayon poisoning or poisoning by some of the chemicals used in the trade.

You might wonder why we expect to turn down some on their case histories, but it is here that we find an accident-prone individual. Pre-employment physical examination reduces the possibility of delayed convalescence from an injury due to the physical condition of the employee at the time of accident. Heart conditions, varicose veins, diabetes, venereal disease, pregnancy, and acute kidney conditions retard in the recovery from an injury. An injury to varicose veins causes ulcers. Diabetics tend to have gangrene when injured; also, there is the possibility of the employee's going into a diabetic coma on the job. Venereal disease retards the proper knitting of bones and repairing of tissues. A person sufferfrom an acute kidney condition is very likely to turn up with a back injury. In pregnancy, lifting small loads after three months is dangerous.

In the reduction of annual labor turnover the pre-employment physical examination is a help. A well person is a happy person; therefore, if the applicant is found to be in good health, better labor relations will exist. Poor physical condition causes worry, naturally results in low production and poor quality; because of the unrest of the mind and the poor health they tire more quickly. I say that it will tend toward better labor relations, because each of us knows that when a person is happy on the job and producing good quality work there are no grievances. Grievances usually occur when the worker needs constant correcting to improve his quality. We find that, because of both the correcting by the supervisor and the fact that they tire more quickly, these workers become dissatisfied with their jobs and leave your employ to seek greener pastures elsewhere. It is my opinion that when an employee knows that there are no contagious diseases in his work area he is better satisfied and appreciates what the management is doing to safe-

The pre-employment physical examination has helped absenteeism because you will not have those persons in your plant who are not capable of working your 40 or 48-hour schedule. Anything that might be done to help absenteeism is a step further along the way toward a better safety record. It is often that we find employees being placed on a job just for a day turning up with an accident ranging from minor to lost-time. Pre-employment physical examinations can be justified from the cost angle because, when the aforementioned points have been added to the safety program, you will have a reduction in accident-frequency and accident-severity rates and, in like manner, a reduction in insurance rates.

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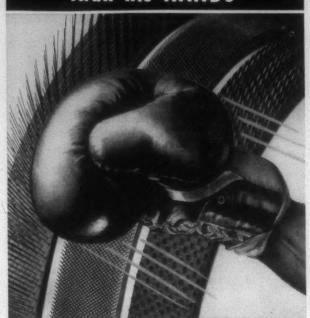
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Suppose your examinations cost \$1,800 per year. It would take only about four rupture repairs to equal this cost, as the repair of rupture usually cost between \$75 and \$100, plus the lost time of the employee's wages for about 13 weeks. I know of one mill that has repaired six ruptures already this year. When we consider having found 30 persons with venereal disease among our applicants during the period of a year, that in itself justifies for me the cost of the examinations.

The justification of pre-employment examinations is illustrated by a case at our mill last year of an employee who was employed before the physical examination was required. He had a blood pressure of 250 and also was syphilitic. He would not have been employed under our present standards. His accident costs \$3,329.69, and it would not have happened if we had had the pre-employment examination.

Review the records in your plant and you will see that it would take but very few accidents, that might have been

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prevented by pre-employment physical examinations, to pay the cost.

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# The Value of Pre-employment Physical Examinations-II

By SIBLE CHANEY, R.N., Plant Nurse Laurens (S. C.) Cotton Mills

THE essential basis for sickness and accident control in industry is the pre-employment physical examination. Without knowledge of the physical condition of the individual it is difficult, if not futile, to develop the facilities required for the conservation and betterment of health. I should like to emphasize the point that safety and health are inseparable. To have a safety program, you must have a health program.

The success of this program is clearly borne out by the progress which has been made in eliminating casualties and suffering among personnel in the plant with pre-employment examination. Under the supervision and with the full co-operation of the company's manager, the medical and personnel departments have collaborated in the development of a well-rounded program of education, prevention, and disposition.

Working on the assumption that education is the most important single factor in promoting industrial safety and health, the company begins this program with the preemployment examination. Before an individual is put on the payroll, he must submit to a pre-employment physical examination. This examination is paid for by the company.

There are many factors to be considered in a physical examination. The first is that the patient is receiving medical attention because we are interested in helping him to help himself. A thorough history of all past and present illnesses, injuries, and operations is one of the most important steps of the examination. Careful and detailed records should be kept. These records reveal the picture of the prospective employee, past and present, and give the doctor a lead towards disabilities and deficiencies.

One young woman, when applying for work in our plant three weeks ago, related to me while I was taking her history that it had been only three weeks since she had undergone a major operation. The doctor in charge of our medical department advised her that she should wait nine more weeks before she would be physically able to go to work. A slight strain or blow on her abdominal muscles, not yet healed, could have resulted in serious injury causing weeks of disability. Another case I recall is that of a man who applied for a job in the slasher room, which required much lifting. While giving his case history he revealed that he had been in an automobile accident six months previously and had received a severe back injury. He had discarded a brace he was supposed to wear at all times; also, it was still necessary for him to take a narcotic daily to relieve the pain from his injury. Months of disability could have resulted if this man had been allowed to lift even a light load. We have had a large number of women applying for work who were mothers of infants a few weeks old. It would not only be unsafe for them to go to work but it would not be fair to their children. The doctor in charge of our medical department advises every mother that her baby must be three months of age before the mother is physically able to be employed.

It is during the taking of the case history that we must be on the alert to detect the danger signals of tuberculosis. If an applicant gives a history of one or more of the symptoms of this disease, such as the spitting of blood, bloodstreaked sputum, steady unexplained loss of weight, poor appetite, chronic indigestion, or a feeling of tiredness for which there seems to be no particular reason, this is brought to the doctor's attention; and, after a thorough physical examination, a chest X-ray is made to determine whether or not tuberculosis is present. A year before Laurens Cotton Mills began requiring pre-employment physical examinations a man, while at his work in our plant, suffered a sudden severe hemorrhage. His case was referred to the county tuberculosis worker. A chest X-ray was made, and active pulmonary tuberculosis was found to be present; it was the cause of the hemorrhage. Several months later, however, he stated that he had got a thread in his throat and that this caused the hemorrhage; and he entered a claim against the mill for disability. There is no doubt in my mind that if this employee had had a physical examination his condition would have been detected, in which case other employees working around him would not have been exposed to this dreaded disease and his own chances for recovery would have been greater.

The second most important procedure is the eye examination. If the employee has low visual aptitude, if he has little or no depth perception, he is a safety hazard not only to himself but those about him. During the eye examination we have the best opportunity to sell eye protection, to urge those with visual defects to wear prescription safety glasses or goggles. Many hazardous jobs have specific eye classifications which must be met in order for a man to remain at his work. These standards are kept high, to protect the employee from serious accident. A man that may be valuable on one job may be a hazard on another.

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Vision tests in industry have a two-fold purpose. The first is to determine the visual ability of the employee and whether it will be sufficient for the work assigned to him and if not, to assist him in obtaining all the visual aid necessary. This is done for the employee's comfort. We all know that a person who has poor vision is constantly straining his eyes and that he constantly suffers from headaches, nervousness, fatigue, and indigestion. Good vision increases his production efficiency. At the same time, in co-operation with the safety department, he should be given eye protection whenever needed. The second purpose of testing the vision, from the medical point of view, is to bring the person's visual shortcomings to his attention, if any exist. We have had many applicants with defective vision and who needed glasses badly who did not even know they had this defect. Later they expressed their appreciation for our finding the defect and our encouraging them to have properly fitted glasses.

Applicants for the most hazardous jobs have been found to have vision as low as 50 per cent. Think of the hazard they would be on an already hazardous job. It is not infrequent for applicants to have poor vision in one eye and to be totally blind in the other.

In a nearby plant, a few weeks ago, a shuttle flew out and caused a minor wound on the right cheek of a young worker. The wound healed satisfactorily, but the worker complained of pain in the right eye. When the vision in this eye was checked there was found to be only 50 per cent. The mill had to bear the expense of the loss of



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vision of the eye—not knowing what percentage of vision there was before the injury, because no pre-employment examination is required in that plant.

Laboratory procedures form another important step in the physical examination. Among these are the test for sugar. If sugar is found to be present, we have reason to believe that the applicant may be diabetic. Anyone suffering with diabetes who is not under specific treatment is an ill person. Diabetes can be controlled by health teaching and diet instructions. Acute kidney infections may be found by the laboratory test. Employment is then deferred until the specimen is negative and the applicant has fully recovered. A blood test is also included in the laboratory procedure. Other laboratory tests are made when ordered by the doctor.

The height and weight are recorded during the physical examination. Increase or loss of weight often indicate hidden trouble. The heart, blood pressure, chest abdomen, and extremities are examined by the doctor.

Recently an applicant was found to have a blood pressure of 250, and the doctor advised him that it would be very dangerous for him to work in the mill. It is not advisable to employ anyone with an extremely high blood pressure or heart disease, because of the fact that working can aggravate either condition. The result might be a fatal heart attack on the job or a stroke which might leave the person paralyzed. Should there be such an occurrence, there is the possibility of the employee's falling into moving machinery.

A person suffering with low blood pressure is subject to dizzy or fainting spells, and such a spell might be the cause of an accident. Also, persons with this ailment are physically unable to work eight hours a day for five or six days a week and thus cause absenteeism and labor turnover.

Infected extremities are not uncommon. During this last summer the employment of several applicants found to have impetigo was deferred. This is a highly contagious disease, and it can be transferred into small cuts that take weeks instead of days to heal.

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During the winter months we find many persons with temperature elevations and actually suffering with acute respiratory infections. They are referred to their family physician for treatment before they are employed, for their own health's sake and to prevent the infection of others. The common cold and other respiratory infections cause a large percentage of absenteeism.

A report of the United States Public Health Service tells us that five out of every one hundred persons employed in industry are victims of disabling dermatitis. It would be unsafe, therefore, to employ anyone who already has a defmatitis, for it would only be aggravated by his work, and complications would follow.

Our records will show other abnormal conditions that we have found, and we shall find more as we continue the examinations. I feel that our pre-employment physical examination records give a heartening support of our safety program when they show hazards controlled, physical defects corrected, and other indications of progress.

#### DISCUSSION

MR. B: Although we have not that program in our plants, we plan at a future date to inaugurate it; and I should like to ask what was the percentage of rejections of employees? How many are on the deferred list?

MR. PITTENDREIGH: I would say about seven to eight per cent.

CHAIRMAN HARDIE: Mr. Pittendreigh says seven to eight per cent. That may be a small percentage, but, as he says, those who are rejected may be the cause of serious

J. F. CHALMERS, general superintendent, Mathews Cotton Mill, Greenwood, S. C.: Do you have a fulltime physician employed?

Mr. PITTENDREIGH: No, we have not.

MR. CHALMERS: Then how do you get the employee and the doctor together?

Mrs. Chaney: The doctor has a certain time to visit our plant every morning, and we notify the applicant to be there at that time to get his examination in our labora-

MR. CHALMERS: When you started this program, of course, you got all the incoming employees, but what did you do with the people already employed? How did you go about finding what their physical condition was?

MRS. CHANEY: We examined those already working in our plant, too. We did it by working overtime and having the doctor come to our plant at night, even, to get the second shift. We would take it by the departments and arrange it that way, having so many from each department come every day until all the employees working in the plant were examined.

MR. CHALMERS: Did you have any difficulty in getting

the employees to come, or was it obligatory?

MRS. CHANEY: At first we had some difficulty. There was a tendency for them to be afraid of the examination; they did not know what it was all about. But we overcame that, and every one submitted to the examination. We think we made it pretty close to 100 per cent.

Mr. STUTTS: I should like to ask a question. When you have the doctor come to your plant to examine one person

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MR. PITTENDREIGH: The cost varies. The nurse does the

Mr. CHALMERS: How much assistance do you give the physician in that examination, Mrs. Chaney? Do you do part of it yourself?

MRS. CHANEY: Yes, I do.

MR. PITTENDREIGH: Someone spoke about the percentage of rejections. I should like to bring out that, even though the percentage is low, we have rejected within the last six weeks an applicant that had a major operation just three weeks previous to the time she applied for employment. If we had allowed that woman to come in and she had even bumped into a machine it might have cost us \$3,000. Then there was the man with the previous injury. If we had allowed that man to come in and he had lifted a slasher beam it might have cost us a large amount over a long, long time, because you know back injuries are

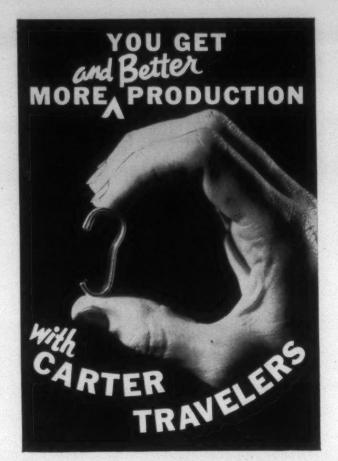
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#### Price of C. C. C. Wool Goes Up

An upward adjustment in the selling price of wool owned by the Commodity Credit Corp. to bring the price in line with parity, was announced Oct. 9 by the U. S. Department of Agriculture. The increase, which became effective Oct. 14, will continue until further notice. The upward adjustment in the price will apply to all domestic wool owned by C. C. C. It averages 11/2 cents per pound, grease basis, with variations depending on grade and size. The adjustment in the selling price of C. C. C.-owned wool is the first increase since prices were reduced in November, 1945, to encourage the consumption of such wool by domestic mills. Additional reductions were made in February and August of 1946. The increase of 11/2 cents per pound, grease basis, announced recently, compares with an average reduction of eight cents per pound, grease basis, made during the November, 1945-August, 1946, period.

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#### Cotton Mills Spending Large Sum Yearly

Cotton mills in the United States are currently spending over 100 million dollars a year on modernization of equipment, expansion, renovation and new building, according to an estimate by the Cotton Mills Information Service. Estimates based on the number of active spindles indicate that \$21,000,000 will be spent by the mills of North Carolina and a total of \$80,000,000 in the South Atlantic states during 1946.

A large part of the new investment being made in the cotton mills throughout the nation will be in the form of new equipment. A check of textile machinery manufacturers indicates that a minimum of \$50,000,000 worth of new machinery will be installed in the cotton mills each year for the next four to five years. This figure is based on orders already on the books. Estimates of the total needs of the cotton mills following the war period, during which more cotton textiles were turned out than ever before, run as high as \$400,000,000,000 to \$500,000,000.

One of the reasons for the huge total investment contemplated is, of course, the fact that few replacements and only essential repairs were made in machinery during the war although the mills were operating at peak capacity. Another reason is that the mills are seeking the latest type of machinery in order to compete effectively with the low wage production of foreign countries. Wage rates in the cotton mills in this country have approximately doubled since 1940. A further reason is that textile machinery research has developed new equipment which is only beginning to become

A wartime inventory of the principal machinery used in spinning and weaving cotton, silk, rayon and synthetic fibers, covering all known mills, indicates currently that the number of carding machines, combing machines, spinning spindles and looms in place in March, 1946, dropped only slightly under the February, 1942, level.

As of March, 1946, the Bureau of the Census reports, 90,582 carding machines were in place (0.04 per cent less than February, 1942); 7,067 combing machines were in place (2.8 per cent less); 23,871,893 spindles (1.3 per cent less), and 506,123 looms (3.1 per cent less).

The Census Bureau said that because of the relative scarcity of new equipment for replacements during World War II, the in place decreases were traceable largely to the scrap-

ping of wornout equipment. Furthermore, the bureau added, the over-all losses between 1942 and 1946 were relatively unimportant.

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The government inventory examined mills spinning yarn or weaving fabrics over 12 inches in width. Narrow fabric looms were excluded. In every category Southern cotton growing states exhibited a substantial leadership in 1942.

Some 72,141 carding machines, or 79.6 per cent, were in place in those states as compared with only 15,441, or 17.1 per cent in New England states. Furthermore, North Carolina's 24,339 carding machines in place far outbalanced the New England total.

For combing machines, the results were comparable. Southern cotton growing states had 3,828 in place in 1942, the Census Bureau survey reported, or 52.8 per cent of the total, while the New England states were found to have 3,219, or 44.55 per cent.

In the spinning spindle category, Southern cotton growing states had 18,184,663 in place in 1942, or 25.2 per cent, compared with 5,297,814, or 21.9 per cent, in New England states. North Carolina alone had 5,861,613 spinning spindles in place, matched against New England's total.

#### Importance of Wool Merchandising Stressed

Addressing a meeting of the Collateral Group of the National Association of Wool Manufacturers in New York recently, Mrs. Elsie Murphy, executive vice-president of S. Stroock & Co., Inc., told the group that the wool textile trades, while a very old industry, are now operating in a new world and are facing problems and challenges which must be met with knowledge, judgment and fortitude. "It is becoming increasingly essential that the executive in charge of merchandising and selling of woolen and worsted fabrics should understand manufacturing operations and their attendant problems," Mrs. Murphy said. Good merchandising should create an identity for the mill, she declared, pointing out the association in the industry of the name of Cyril Johnson with covert cloth, Botany with flannel, Strong Hewat with shetlands, and Stroock with hair cloths.

Ed Wilkinson, assistant to Arthur Besse, president of the National Association of Wool Manufacturers, acted as toastmaster at the meeting and Jesus Echecopar of the Compania Lanera Industrial S. A., Lima, Peru, was introduced and made a brief address.



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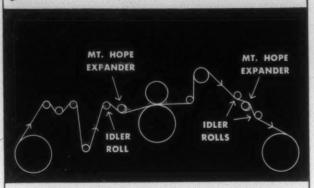
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The diagram herewith shows an installation in a prominent New England plant that has approximately 20 Mount Hope Free-Wheeling Expanders in use at present, and plans to add more as other types of expanders now installed wear out.

The expanders shown are used to assure maximum width and smoothness, first before the cloth enters the nip rolls of the calender and second before it is rolled at the end of the operation. Mount Hope Expanders are also used in a similar manner on most of this plant's other machines.

The roll of the Mount Hope Expander is Neoprene covered and ball bearing mounted. It is so free turning that it can be used for expanding delicate fabrics like rayon marquisette without putting too much tension on the warp. As many as 6 of them at one time have been used on cotton marquisette in front of a stack of dry cans, thus producing exceptional crosswise stretch.

The minimum tension on the warp greatly reduces the tendency of the cloth to contract in width, and also increases the life of the Neoprene surface, because less drag is required to turn the expander.

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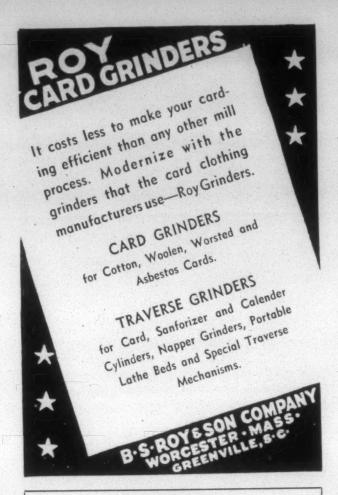
Ball bearings, grease packed, are securely mounted in steel spools to outlast many Neoprene sleeve coverings, and so designed that they can not stick nor turn on the axle and cut it.

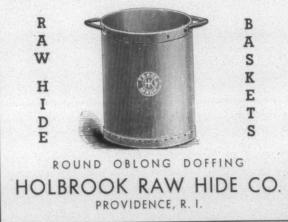
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(Continued from Page 52) state as it may be possible to produce them. After padding and drying, the treated cloth is cured at elevated temperatures to polymerize the resin within the fiber. A subsequent light wash removes traces of surface and unreacted resin. Properly applied these resins produce full soft hands without stiffening or crispness, and with marked improvement in crease-resistant properties. They have been one of the major factors in the vast increase in the use of spun rayon and spun rayon blends in apparel wear. Their use, however, requires exact control of drying and curing temperatures and catalyst concentration. All steps in the treatment of cloth going into this finish must be carried out with a minimum of tension, if proper results are to be secured. In addition, the construction of the cloth is very important, and denier size, length of staple and twist all exert an important influence on the finished result.

While a few finishes of this type, e. g. mercerizing and parchmentizing have been produced for a great many years, there are certain finishes in the development stage and also in production which are comparative newcomers. I refer to the several processes which are now available for the shrinkage control and stabilization of viscose rayon piece goods. Three main types of treatment are in the use for this purpose:

- (1) The first method and that which has seen the biggest volume of production up to the present time involves the application to the cloth of varying concentrations of aldehyde resins. As in the case of the crease-resistant finish, urea and melamine formaldehydes are most commonly used, but the industry is not limited to these two types and other aldehyde resins which overcome some of the drawbacks of the first two are in the development stage and will undoubtedly prove of value for certain purposes. Method of application of these aldehyde resins for stabilizing shrinkage is similar to that employed for crease resistance.
- (2) The second method uses simple aldehydes such as formaldehyde or glyoxal in place of the synthetic resins described above. Cloth is padded through the aldehyde solution together with an acid or acid forming catalyst, generally tenter dried with controlled tension and cured for several minutes at high temperatures. Neutralization of the treated goods is carried out by rinsing with a weak alkaline solution plus a small amount of a synthetic detergent. The cloth is finally slack dried and framed to the correct width.
- (3) The third process uses a strong solution of caustic soda to achieve shrinkage control. The cloth, which may be treated in the gray, boiled off or dyed state, is passed through approximately a 30 per cent solution of caustic soda, aired for a few seconds and then immediately neutralized by passing into a solution of sodium bicarbonate or acid. A thorough rinsing completes the operation and the goods are slack dried and framed in width.

All of these processes require a high degree of technical control and supervision if uniform results are to be obtained. All of them have certain advantages and disadvantages and the use of any one of these treatments in the finishing of a particular type of cloth requires a careful consideration of a great many factors, such as for example, end use of the cloth, type of hand required, whether firm or soft, fiber content, type of weave and so forth. Only time

will tell which of these processes will prove to be most acceptable to the trade as a whole, or whether some new process will shortly render them all obsolete.

#### Machinery

The use of stainless steel has become increasingly prevalent in modern textile finishing machines, particularly in dye jigs and vessels, pad boxes and continuous dyeing ranges. Its use results in better machine cleanliness and the amount of rehandling due to spots and stains is reduced. Mechanical aids so necessary for the controlled application of the durable dyes and finishes include Microset and pneumatic pressure controlled padders, overfeed pin and clip tenters, tensionless air driers and controlled temperature curing ovens. Most of the new type continuous dyeing machines are being equipped with devices which automatically control and record the temperature, the amount of feed liquors and in some cases even the pH of the dye

Electronic devices are being used, as for example in the General Electric weft straightener and to control automatically the speed of different machines in range. The effects of high-frequency drying and curing and the use of infra-red drying are also receiving careful study. In short, the machine builders are contributing their share in enabling the textile finisher to meet the exacting requirements called for in the production of the specialized finishes of

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In conclusion, I should like to put in a plea for continued and increasing co-operation between the various branches of the industry, the yarn producer, the designer, the weaving mills, finishing plants and converters. The textile industry of today with its multiplicity of new synthetic fibers and finishes faces problems enough even with full co-operation on the part of all concerned. Without such co-operation we shall not be able to take full advantage of the possibilities that lie before us. Two notable examples of the value of the co-operative effort are the development during the war of the various nylon and high tenacity rayon parachute cloths and the development of the self-sealing water repellent Shirley cloth. These problems could not have been solved as rapidly in any other way. We still have, and with new fibers and fiber blends arriving almost daily, will increasingly continue to have our problems, but if each of us has a little knowledge of what the other fellow is trying to do we shall all be able to do a better job. Offhand, I can think of two important problems which might be solved in this manner. Many of you are aware of the importance of denier staple length, and twist in the production of suiting, sportswear and dresswear for the well known crease resistant finish. Such cloths, when properly designed, executed and finished compare favorably in their appearance and properties with woolens and worsteds. One of the outstanding drawbacks of cotton dress fabrics today is their lack of such crush-resistance. Is it not conceivable that studies similar to those made on rayon might result in vastly superior cotton fabrics? Another important problem on which we do not have all the answers is the question of stabilization and shrinkage control of rayon fabrics. Different constructions vary enormously in what might be termed their relaxation shrinkage, and in their tendency to shrink progressively in successive washings. What are the reasons for these variations? Here again a co-operative study might result in a better end product.

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## Cotton Goods Market

The Worth Street market in New York City recently has been following one of two selling policies. Some commission houses continue to sell goods through the end of this year, while those in the other group remain withdrawn. Those organizations which release production through the fourth quarter or through October-November, whatever the individual program may be, take the view that prices of cotton goods are too high at present, and that it is better to have forward business booked than accumulated fabrics in

Selling agencies on the other side of the fence let the cotton situation govern their actions. That cotton prices are shaping the selling policies of many Worth Street houses is admitted in the trade. Many persons say that they have no intention of selling only to see cotton soar upward with the resultant losses through replacement. On the other hand, there is a school of thought which fears a sudden drop in cotton and they declare that the mill can best protect itself by selling ahead. Most houses are following a middle of the road policy between these two selling philosophies, a middle of the road that is so thin that the sellers may slip off either way at a moment's notice.

Third quarter output of 2,210 million yards of cotton broad woven goods is indicated by production figures up to the end of August, and by preliminary September figures, bthe Civilian Production Administration said Oct. 1.

A reduction of approximately ten per cent has been made in the quantity of cotton fabric that mills must set aside for for export, C. P. A. said Oct. 1 in announcing the fourth quarter program for cotton fabric distribution. About 136 million yards of cotton fabric will thus be set aside for exports under Order M-317A. The total amount of material which may be exported will be the same as in the third quarter-151 million yards-since C. P. A. has authorized the Office of International Trade of the Department of Commerce to issue licenses for export during the fourth quarter of 15 million yards of cotton which are not covered by ratings from the export set-aside.

A schedule of discounts to be applied on mill sales of short lengths and mill seconds of cotton fabrics, supplanting a uniform discount of five per cent, was announced by the Office of Price Administration Oct. 8. It applies to all short lengths and seconds except those for which a specific price or discount rate has already been established. The revised discount schedule sets their price accordingly, reflecting normal trade practice.

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# **Cotton Yarns Market**

Lesser known buyers who habitually by-pass suppliers in the Philadelphia yarn market and make trips to the South to secure yarn from spinners are still diverting sizable quantities from ordinary channels, trade sources contend. Spinners have been warned that from here on, manufacturing consumers will be following the spinners' actions more closely than ever before. It is suggested that many buyers successfully dealing direct with spinners at present, shape up as the type that will later on be haggling over prices.

With ceilings favorable and scant price resistance encountered, spinners' pulse feelers in the market are strongly urging mill men to devote increased attention to valuable accounts which have sometimes been loosely handled in

recent years

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Forward selling has fallen off considerably, with most mills having accepted all the business they intend to transact in October. In many houses, this month's allocations have been made and chief attention is now focused on cotton futures.

Many spinners who are selling for no longer than 30 days ahead have already issued their regular allcoations for October and are now marking time until the first of the month. Such producers are already anticipating higher yarn prices for November, particularly after digesting the latest government crop report, which indicates bullish cotton.

Market observers who have recently returned from business trips through Southern spinning regions say spinners indicated they were satisfied with prices, even before the October price hike. Accordingly, should another revision of yarn ceiling materialize the first of next month, it is believed

that producers will be nicely fixed, profitwise.

It is reported, however, that buyers should not count on the present series of price increases to boom over-all production. Output at most mills, visitors say, is encouraging. Some trouble is still experienced with absenteeism, but not on the scale that hampered the industry six months back. Production is there, observers state, but distribution is still distorted.

A 1946 cotton crop of only 8,724,000 bales—the smallest since 1896 with the exception of 1921—has been forecast by the United States Department of Agriculture. This represents a decline of 477,000 bales, or 4.9 per cent, from the department's Sept. 1 forecast. Production last year was 9,015,000 and the 1935-44 average was 12,553,000.







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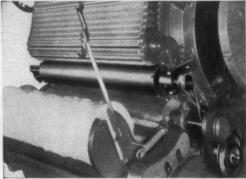
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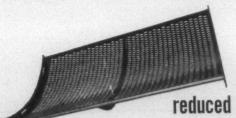
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investment in the Continuous Stripper returned in one year  $86^{\circ}$ 

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reduced foreign matter 26%

0% BEFORE installing new screen

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new screen

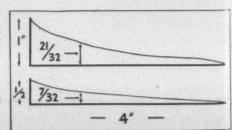
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> .481 neps per sq. inch

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BEFORE installing new screen

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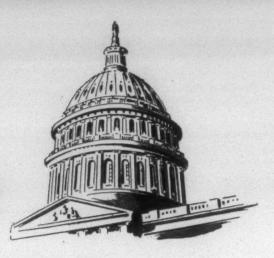
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Exclusive and Timely News from the Nation's Capital



ABOUT HALF OF BOTH WORKERS AND VETERANS ON JOBLESS PAYROLLS have drawn benefits for ten weeks, or more, on claim of lack of "suitable work," or of "restrictions on eligibility." There's substantial evidence that some of the big unions are encouraging workers to remain on jobless rosters as long as possible. Ultimate total cost in benefit payments in the event of a substantial business recession or "shake-down" could triple this year's outgo.

Unions are becoming concerned over the condition of the unemployment compensation reserves of the big industrial states, and discussing a higher payroll tax to replenish the funds. A higher tax proposal will be tied to this winter's demand for \$25 a week for 26 weeks of idleness.

Appropriation bills face the most severe trimming in 15 years in the next session of Congress. At the same time a contingent of members from poor or sparsely settled states will make a drive of larger unmatched grants for assistance to aged and indigent persons. Curbing expenditures will have an outstanding place in the legislative picture.

Coal operators are not making progress in the effort to come to an agreement with Lewis or get back their mines. The Administration saddled the mines with higher labor costs, and now its stuck with their operation. Southern operators have refused to yield to Administration pressure to get into line and pay last spring's wage increase and welfare benefit levy.

Philip Murray may retire soon as the non-salaried head of C.I.O. because of ill health, but he wants to retain his \$18,000 a year presidency of the United Steelworkers. His retirement would start an internal war for control, which might quickly split or wreck C.I.O. Murray continues to hold on only because of inability of the fighting factions to agree on a successor. Walter Reuther appears to be a likely choice.

Building and construction is sagging into stagnation and presents the worst picture in the price control field. Construction costs are inflated and distorted, with quality unrelated to prices, contract awards declining, and building plans abandoned. Housing problem promises to require at least five years for solution.

A.F.L. has devised a plan for asking employers for a confidential look at their books before opening wage negotiations. The argument is that the unions needs facts on production costs if they are to present realistic demands based on ability to pay. The proposal is about the same as C.I.O. made on the automobile makers.

A break in commodity and goods prices, with a sharp decline in business and employment, is clearly signaled by the government's barometers, with the timing now placed in the first half of 1947. There's agreement among government leaders that the break is coming,

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with difference of opinion only as to timing. Official efforts are turning to cushioning and limiting the duration of the shake-down.

O.P.A. and its price controls are enmeshed in what looks like hopeless confusion and chaos. Amid a storm of producer and consumer protests, it is backing and filling, reversing itself and bogging down in a mass of distortions and maladjustments. It has become the Administration's biggest headache. Critics assert the planners could not have produced a worse mess if they had tried their best to do so. Indecision, controversy and name calling grips Administration officials as to a way out.

Union leaders are getting set for the next Congress to enact some kind of labor legislation. They are not sure the President can get away with a veto next time. They plan to press for clauses in wage contracts that will forestall any limitation on union activity, including elemination of all no-strike clauses. These proposals by private contract would nullify many features in the vetoed Case Labor Bill.

Following the President's recent decontrol message, leaders in the cotton textile industry are beginning to have hopes that the Office of Price Administration will drop at least some of its items from maximum price regulations. However, the industry is still up against a belief held by most 0.P.A. executives that textiles should remain under controls through the spring of next year.

Members of the O.P.A. Washington staff are getting scared and are beginning to poke around for new jobs. Congress will convene in January with a revised membership, and there is a good chance that the pricing agency will be a dead duck just as soon as appropriate legislation mirroring an anti-O.P.A. attitude can be enacted.

One whisper in Washington is that a list of products which are to remain under control is to be announced, and that all items not included in the list will be released automatically from regulations. It is said that when textiles come up for consideration, such products will be decontrolled upon an item-by-item basis and that each decision will be governed by the end use of the item and its supply.

The Civilian Production Administration seems to be looking more kindly upon the textile industry. C.P.A. officials are reported to be co-operating in arrangements, to relinquish most of this agency's controls on textile manufacturing before the end of the fourth quarter.

### COMPARE

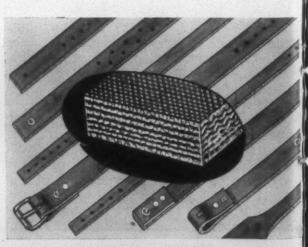
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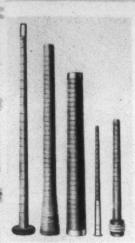
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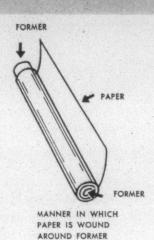
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